

V O L U M E   T H R E E

**VSMP**

**TECHNICAL  
APPENDIX B2  
Surface Water Hydrology**

## SURFACE WATER HYDROLOGY TECHNICAL APPENDIX

This Technical Appendix includes the hydrology data listed below. This data was used to determine the potential for hydrology-related impacts and to prepare Section 11.1

### Hydrology Data from EBMUDSIM

- EBMUDSIM hydrology output: mean monthly storage and flow values in each year of the hydrology record. Maximum, minimum and average values are also reported by month.
- Hydrographs created from the EBMUDSIM output. The hydrographs compare 1990 Existing Conditions (Base Case), 2020 No Action Conditions and 2020 conditions with each of the Primary Composite Programs, organized by water year type and the average over the entire record.
- EBMUDSIM hydrology data for each set of 1990 and 2020 conditions organized by water year type and the average over the entire record.
- Flow exceedance probability graphs, created from the EBMUDSIM output. As with the exhibits above, graphics are included for each EIS/EIR planning scenario and each Mokelumne River data point.
- The assumptions used in the hydrology study concerning the amount of water added to the river by the groundwater and conjunctive use components of Composite Programs II, IV and VI. It is also assumed this water is added to the river below and near Camanche Dam.

### Hydrology Data from PROSIM

- PROSIM output for 1990 Existing Conditions, 2020 No action and Composite Program IV. The Delta inflow and outflow data columns with “adjusted” in their titles have been included to incorporate the additional flow from the Mokelumne River associated with Composite Program IV.

## **HYDROLOGY DATA FROM EBMUDSIM**

## Pardee Reservoir Storage in Acre-Feet

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1921	172,799	145,138	135,130	115,768	206,157	209,995	196,730	193,267	194,481	200,729	200,670	182,684
1922	183,970	176,900	150,675	168,483	209,985	209,995	200,039	193,220	192,199	196,839	195,064	182,684
1923	193,960	190,350	190,794	209,995	209,985	209,995	202,543	198,590	200,017	207,524	206,854	182,684
1924	196,082	190,163	184,340	188,330	188,639	184,028	176,252	166,390	159,469	161,927	160,546	161,716
1925	170,473	209,960	209,985	209,995	209,985	209,995	197,159	192,848	195,109	201,831	202,440	182,684
1926	197,412	208,459	209,985	209,995	209,985	209,995	192,140	187,169	187,179	193,278	202,256	182,684
1927	197,886	209,960	209,985	209,995	209,985	209,995	200,641	196,991	197,813	203,645	205,225	182,684
1928	189,717	191,691	209,985	209,995	209,985	209,995	199,712	197,245	199,470	206,586	209,995	182,684
1929	177,033	174,637	178,424	190,583	196,085	189,125	181,844	181,414	183,732	191,387	194,943	182,684
1930	192,168	192,978	209,985	209,995	207,609	198,724	187,953	186,910	190,053	198,036	202,307	182,684
1931	176,345	169,950	170,464	169,321	172,531	169,333	170,075	160,552	151,682	148,574	146,133	152,043
1932	138,324	136,999	116,063	130,048	172,444	209,995	206,752	204,231	205,908	209,985	208,493	182,684
1933	185,540	169,509	175,389	203,915	209,985	209,995	196,453	194,139	196,979	204,304	202,995	182,684
1934	194,228	195,925	209,985	206,606	203,807	209,995	205,860	192,758	183,637	179,407	181,034	182,005
1935	186,078	193,629	209,985	209,995	209,985	209,995	197,405	193,510	194,789	202,245	203,655	182,684
1936	209,985	209,960	202,205	201,515	209,985	209,995	199,757	197,844	200,269	206,942	206,769	182,684
1937	184,047	209,960	209,985	209,330	209,985	209,995	195,042	192,046	193,252	198,982	197,525	182,684
1938	191,825	209,960	209,985	209,995	209,985	209,995	209,985	208,899	209,995	209,985	209,995	182,684
1939	198,730	193,690	200,981	209,995	209,985	209,995	200,767	199,392	201,792	209,985	206,690	182,684
1940	209,985	209,960	209,985	209,995	209,985	209,995	193,957	191,176	192,500	199,390	200,024	182,684
1941	195,642	209,960	208,021	205,213	209,985	209,995	200,711	197,456	199,604	205,464	204,214	182,684
1942	209,985	209,960	181,360	189,513	209,985	209,995	209,793	205,258	206,895	209,907	209,995	182,684
1943	209,985	208,636	209,985	209,995	209,985	209,995	199,398	198,690	201,893	209,985	209,521	182,684
1944	194,768	195,146	209,444	209,995	209,985	182,968	171,907	170,513	172,315	178,327	192,164	182,684
1945	185,438	209,960	209,985	197,259	209,985	209,995	196,881	194,407	195,745	202,593	208,431	209,985
1946	206,412	183,944	162,326	148,251	209,985	202,913	189,558	186,126	187,602	195,259	201,972	182,684
1947	181,020	183,028	193,880	199,229	195,927	202,826	194,925	193,650	195,969	208,838	205,123	182,684
1948	198,962	191,901	197,437	209,995	195,754	209,995	196,809	195,184	198,331	203,931	204,595	182,684
1949	189,358	183,106	193,568	204,461	209,985	200,645	191,801	190,068	192,452	198,805	202,107	182,684
1950	206,416	209,960	209,985	209,995	209,985	209,995	197,588	195,262	198,106	206,969	209,995	209,985
1951	209,985	209,960	209,985	209,995	209,985	209,995	191,336	186,961	188,871	191,118	190,267	182,684
1952	209,985	209,960	209,985	209,995	209,985	209,995	209,985	209,985	209,985	209,995	209,995	182,684
1953	209,985	200,329	209,985	209,995	209,985	209,995	207,326	203,975	209,033	209,985	209,995	182,684
1954	199,319	209,960	209,985	209,995	209,985	209,995	190,975	187,910	192,762	201,792	208,090	182,684
1955	190,693	187,801	202,208	209,995	209,985	209,995	194,897	192,439	193,583	199,045	199,934	209,985
1956	209,985	209,960	209,985	209,995	209,985	209,995	203,390	199,968	200,939	209,985	209,995	182,684
1957	196,715	209,960	209,985	208,126	209,985	209,995	191,502	184,745	185,019	195,557	203,486	182,684
1958	207,461	209,960	209,985	209,995	209,985	209,995	209,985	209,985	209,995	209,985	209,995	182,684
1959	200,703	209,960	209,985	209,995	209,985	209,995	197,027	194,124	194,866	200,235	199,903	182,684
1960	181,457	192,358	202,958	209,995	209,985	209,995	196,573	193,012	193,684	197,910	198,350	182,684
1961	183,807	176,784	174,692	175,100	176,674	186,470	182,953	181,540	184,447	191,216	188,047	182,684
1962	181,234	209,960	192,401	200,151	191,297	209,995	196,213	194,501	196,762	208,383	209,995	182,684
1963	201,973	209,960	205,950	209,995	209,985	209,995	195,925	194,727	198,849	206,848	209,995	182,684
1964	196,443	189,711	202,366	209,995	209,985	185,336	174,344	173,303	176,996	186,323	197,492	209,985
1965	209,985	209,960	196,877	209,995	209,985	209,995	194,575	193,358	209,995	209,985	209,995	182,684
1966	177,132	159,634	164,542	195,963	209,985	209,995	185,900	179,004	181,926	184,171	185,679	182,684
1967	209,985	199,031	209,985	209,995	209,985	209,995	209,985	208,632	209,995	209,985	209,995	182,684
1968	197,267	209,960	209,985	209,995	209,985	209,995	191,024	185,348	186,155	190,390	197,091	182,684
1969	209,985	209,960	209,985	209,995	209,985	209,995	209,985	209,985	209,995	209,985	208,404	182,684
1970	209,985	209,960	209,985	197,625	209,985	209,995	198,231	193,591	194,547	200,310	209,995	209,985
1971	209,204	201,900	209,635	207,029	207,984	209,995	206,528	209,985	209,995	209,985	206,725	182,684
1972	174,450	160,710	185,536	209,995	209,985	209,995	194,816	190,203	191,887	199,541	203,398	182,684
1973	209,985	209,960	208,007	207,910	209,985	209,995	198,722	192,951	194,308	202,462	209,995	209,985
1974	209,985	204,546	209,985	209,995	209,985	209,995	209,985	209,985	209,995	209,985	207,288	182,684
1975	186,196	204,567	209,985	198,237	209,985	209,995	209,074	209,985	209,995	209,985	209,995	182,684
1976	187,812	179,401	175,281	173,743	171,230	167,298	162,224	157,137	152,142	144,342	135,865	123,179
1977	115,226	101,001	91,053	89,242	92,338	93,853	95,282	95,870	95,592	91,092	86,110	74,822
1978	65,598	55,079	55,090	46,500	36,695	26,221	24,753	18,927	22,604	23,237	19,539	16,800
1979	23,862	41,028	92,052	142,031	198,622	209,995	203,613	199,840	200,031	204,525	205,826	182,684
1980	209,985	209,960	209,985	209,995	209,985	209,995	209,985	207,252	207,724	209,985	207,686	182,684
1981	209,206	209,960	209,985	209,995	209,985	209,995	193,801	184,873	184,246	190,514	204,628	209,985
1982	209,985	209,960	209,985	209,995	209,985	209,995	209,985	209,985	209,995	209,985	209,995	209,985
1983	209,985	209,960	209,985	209,995	209,985	209,995	209,985	209,985	209,995	209,985	209,995	209,985
1984	209,985	209,960	209,985	209,100	209,985	209,995	205,504	209,985	209,995	209,985	209,995	182,684
1985	166,355	170,529	204,904	209,995	202,228	201,417	182,899	180,248	182,907	191,694	199,897	182,684
1986	200,637	209,960	209,985	209,995	209,985	209,995	201,530	201,308	206,542	209,985	209,995	182,684
1987	188,821	187,743	196,788	199,812	194,993	194,471	194,131	195,670	197,477	190,724	183,674	182,457
1988	183,932	174,287	172,652	176,867	180,675	188,416	180,304	186,396	182,264	176,084	170,737	165,968
1989	151,837	146,439	192,699	209,995	209,985	209,995	197,621	193,227	196,311	193,709	200,284	182,684
1990	196,870											

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Base Case w/ 25% Limit on Early Deficiencies

Fish Releases - CDFG 1961 Agreement

Drought Planning Sequence - 1976-1977-185 TAF

## Pardee Reservoir Elevation In Feet

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1921	550	535	529	517	566	568	562	560	561	564	563	555
1922	556	552	538	548	568	568	563	560	560	562	561	555
1923	560	559	559	568	568	568	564	563	563	567	566	555
1924	561	559	556	558	558	556	552	547	543	544	544	544
1925	549	568	568	568	568	568	562	560	561	564	564	555
1926	562	567	568	568	568	568	560	557	557	560	564	555
1927	562	568	568	568	568	568	563	562	562	565	566	555
1928	558	559	568	568	568	568	563	562	563	566	568	555
1929	552	551	553	559	561	558	555	554	555	559	561	555
1930	560	560	568	568	567	563	558	557	559	562	564	555
1931	552	549	549	548	550	548	549	544	539	537	536	539
1932	531	530	517	526	550	568	566	565	566	568	567	555
1933	556	548	551	565	568	568	562	560	562	565	565	555
1934	561	561	568	566	565	568	566	560	555	553	554	555
1935	557	560	568	568	568	568	562	560	561	564	565	555
1936	568	568	564	564	568	568	563	562	563	566	566	555
1937	556	568	568	567	568	568	561	559	560	563	562	555
1938	559	568	568	568	568	568	568	567	568	568	568	555
1939	563	560	564	568	568	568	564	563	564	568	566	555
1940	568	568	568	568	568	568	560	559	560	563	563	555
1941	561	568	567	566	568	568	563	562	563	566	565	555
1942	568	568	554	558	568	568	568	566	566	568	568	555
1943	568	567	568	568	568	568	563	563	564	568	567	555
1944	561	561	567	568	568	555	550	549	550	553	560	555
1945	556	568	568	562	568	568	562	561	561	564	567	568
1946	566	556	545	537	568	565	558	557	557	561	564	555
1947	554	555	560	563	561	564	561	560	561	567	565	555
1948	563	559	562	568	561	568	562	561	562	565	565	555
1949	558	555	560	565	568	563	559	559	560	563	564	555
1950	566	568	568	568	568	568	562	561	562	566	568	568
1951	568	568	568	568	568	568	559	557	558	559	559	555
1952	568	568	568	568	568	568	568	568	568	568	568	555
1953	568	563	568	568	568	568	566	565	567	568	568	555
1954	563	568	568	568	568	568	568	559	558	560	564	555
1955	559	557	564	568	568	568	561	560	560	563	563	568
1956	568	568	568	568	568	568	565	563	564	568	568	555
1957	562	568	568	567	568	568	559	556	556	561	565	555
1958	567	568	568	568	568	568	568	568	568	568	568	555
1959	563	568	568	568	568	568	568	562	560	561	563	555
1960	554	560	565	568	568	568	562	560	560	562	562	555
1961	556	552	551	551	552	557	555	554	556	559	558	555
1962	554	568	560	563	559	568	561	561	562	567	568	555
1963	564	568	566	568	568	568	561	561	563	566	568	555
1964	562	558	564	568	568	556	551	550	552	557	562	568
1965	568	568	562	568	568	568	561	560	568	568	568	555
1966	552	543	546	561	568	568	557	553	555	556	556	555
1967	568	563	568	568	568	568	568	567	568	568	568	555
1968	562	568	568	568	568	568	568	559	556	557	562	555
1969	568	568	568	568	568	568	568	568	568	568	567	555
1970	568	568	568	562	568	568	568	562	560	561	563	568
1971	567	564	568	566	567	568	566	568	568	568	566	555
1972	551	544	556	568	568	568	561	559	559	563	565	555
1973	568	568	567	567	568	568	563	560	561	564	568	568
1974	568	565	568	568	568	568	568	568	568	568	566	555
1975	557	565	568	562	568	568	568	567	568	568	568	555
1976	557	553	551	551	549	547	545	542	539	535	530	522
1977	517	507	499	498	500	501	502	503	503	499	495	485
1978	476	465	465	454	440	420	417	402	412	413	404	397
1979	415	447	500	533	563	568	565	563	563	565	566	555
1980	568	568	568	568	568	568	568	566	568	568	567	555
1981	567	568	568	568	568	568	560	556	556	559	565	568
1982	568	568	568	568	568	568	568	568	568	568	568	568
1983	568	568	568	568	568	568	568	568	568	568	568	568
1984	568	568	568	567	568	568	566	568	568	568	568	555
1985	547	549	565	568	564	564	555	554	555	559	563	555
1986	563	568	568	568	568	568	564	564	566	568	568	555
1987	558	557	562	563	561	561	560	561	562	559	555	555
1988	556	551	550	552	554	558	559	557	555	552	549	547
1989	539	536	560	568	568	568	562	560	561	560	563	555
1990	562	561	568	568	568	550	552	552	554	559	553	549
Minimum	415	447	465	454	440	420	417	402	412	413	404	397
Maximum	568	568	568	568	568	568	568	568	568	568	568	568
Average	557	557	559	560	563	562	558	557	558	560	560	552

92 220 10-5501-WSP  
 Base Case w/ 25% Limit on Early Deficiencies  
 Fish Releases - CDFG 1961 Agreement  
 Drought Planning Sequence - 1976-1977-185 TAF

Total Pardee Releases in CFS

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1921	1,100	1,100	1,084	1,070	1,098	2,551	404	215	130	109	194	571
1922	307	693	1,033	462	1,991	4,292	559	276	167	161	312	935
1923	432	516	355	573	1,641	1,428	431	225	136	118	214	619
1924	0	0	0	0	0	0	55	90	62	0	0	0
1925	0	419	676	999	2,528	1,739	396	212	128	106	188	543
1926	2	0	7	253	449	181	434	227	137	119	220	637
1927	179	881	656	1,018	2,027	2,707	439	228	138	121	223	648
1928	164	79	920	1,037	2,364	320	346	191	116	88	161	423
1929	39	0	0	0	134	263	304	175	105	75	116	332
1930	0	0	56	290	367	1,083	341	189	114	87	146	411
1931	0	0	0	0	0	0	9	76	55	0	0	0
1932	433	626	988	527	552	2,141	444	231	139	129	222	642
1933	0	80	0	0	446	505	468	240	145	130	242	719
1934	159	13	118	0	0	76	145	111	67	22	0	0
1935	53	210	82	1,524	1,323	2,115	409	217	131	110	198	573
1936	96	2,158	1,100	1,100	2,597	2,008	448	232	140	123	227	665
1937	71	239	1,072	1,100	1,746	1,512	484	247	149	135	255	752
1938	253	979	2,101	1,602	4,793	4,013	646	264	179	246	282	728
1939	29	19	0	21	66	226	314	178	108	96	121	338
1940	121	1,184	1,484	1,186	3,182	1,112	470	241	145	131	243	720
1941	342	621	1,100	1,100	1,765	2,331	506	255	154	142	271	801
1942	679	999	1,100	1,023	2,381	3,564	614	298	180	178	470	929
1943	790	971	2,128	2,115	2,857	1,486	477	244	147	142	247	716
1944	0	0	159	194	537	925	385	207	124	103	181	529
1945	306	823	708	985	1,451	2,080	459	237	143	127	239	844
1946	794	855	1,085	1,097	1,578	1,100	434	227	137	119	218	633
1947	297	188	14	387	278	105	291	169	102	71	111	308
1948	0	0	0	453	1,100	2,235	428	224	135	116	211	616
1949	101	2	115	667	1,061	1,013	383	206	124	101	177	509
1950	0	715	772	1,222	1,563	2,107	450	233	141	125	2,586	4,099
1951	1,272	1,126	1,135	1,712	2,060	583	555	275	166	160	310	925
1952	869	1,295	1,366	1,836	4,369	4,029	1,120	324	267	281	305	848
1953	377	540	416	995	866	1,736	541	269	163	321	299	700
1954	0	92	600	908	1,065	325	444	231	139	122	224	657
1955	89	135	22	56	408	507	401	214	129	107	191	2,267
1956	2,724	1,327	1,207	1,310	2,757	2,920	544	271	163	156	357	816
1957	5	93	514	412	1,122	1,785	460	237	143	127	235	688
1958	58	1,119	1,313	2,236	2,902	3,229	606	335	212	298	279	629
1959	0	306	314	79	67	138	352	194	117	91	154	438
1960	0	0	80	560	518	336	187	113	85	143	408	
1961	16	0	0	0	0	0	205	157	105	47	31	45
1962	0	157	800	1,006	894	1,506	466	239	144	130	244	707
1963	97	993	498	1,432	3,125	1,960	513	258	156	145	301	790
1964	217	348	0	73	165	604	382	206	124	102	178	2,877
1965	2,311	1,156	1,100	1,353	1,827	2,331	782	366	273	561	634	889
1966	422	344	267	0	151	77	541	270	162	155	297	888
1967	452	774	1,142	1,630	2,271	3,824	1,693	285	234	296	335	770
1968	87	183	412	300	119	256	420	221	133	114	208	611
1969	1,981	1,632	1,260	2,247	4,221	3,316	766	417	394	441	335	988
1970	1,946	1,125	1,308	1,014	1,303	1,631	532	266	160	152	435	948
1971	753	819	842	941	692	1,746	628	434	307	369	255	754
1972	384	355	177	82	268	812	477	244	147	133	252	736
1973	570	1,169	1,033	971	1,832	1,332	543	270	163	156	473	972
1974	1,190	836	1,548	1,632	1,904	1,978	614	521	358	234	199	572
1975	40	0	880	1,100	1,201	2,604	713	500	498	400	336	711
1976	25	0	0	0	0	0	0	19	20	0	0	0
1977	0	0	0	0	0	0	0	9	43	0	0	0
1978	0	0	0	152	240	303	278	238	172	112	114	147
1979	80	3	88	159	272	850	352	342	257	200	325	853
1980	2,043	2,376	1,548	1,156	1,796	2,482	883	248	150	218	236	682
1981	0	221	328	383	153	161	430	225	135	118	218	966
1982	1,520	2,672	2,340	3,867	4,299	2,669	881	505	343	438	1,097	1,692
1983	1,723	2,410	3,811	2,090	3,058	5,869	2,998	744	580	564	1,670	2,670
1984	1,500	1,235	1,259	1,041	1,974	1,456	628	348	204	292	464	808
1985	323	178	11	624	291	148	417	220	132	113	206	599
1986	264	4,406	2,901	1,791	2,783	1,848	481	245	149	208	274	640
1987	0	0	0	0	0	0	151	113	69	23	1	0
1988	53	51	0	0	0	0	95	119	87	12	0	0
1989	126	0	0	770	1,385	830	416	239	154	119	194	528
1990	53	110	0	129	231	873	119	124	87	19	0	0

Minimum	0	0	0	0	0	0	0	9	20	0	0	0
Maximum	2724	4,406	3,811	3,867	4,793	5,869	2,998	744	580	564	2,586	4,099
Average	433	628	705	822	1,350	1,464	496	247	163	156	287	735

## Camarache Reservoir Storage in Acre-Feet

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1921	336,466	357,109	381,068	430,879	395,804	430,879	395,704	353,349	316,204	293,027	285,909	311,872
1922	325,702	334,330	386,503	400,600	334,188	430,879	398,510	353,313	311,913	287,822	286,576	320,552
1923	317,294	320,880	335,962	361,568	406,561	430,260	389,790	341,203	298,276	271,150	262,235	286,432
1924	279,386	274,059	266,373	255,414	238,244	217,554	200,585	188,451	179,691	172,060	164,743	157,469
1925	152,720	175,950	212,297	262,653	370,151	419,892	384,822	342,867	306,100	283,323	276,423	298,103
1926	292,006	289,114	281,402	286,880	295,328	281,508	279,719	268,418	259,914	256,809	265,621	295,374
1927	301,829	301,269	327,194	351,129	379,380	430,879	392,593	345,882	304,219	279,169	272,095	298,618
1928	301,824	302,925	273,355	325,815	430,893	408,915	384,244	354,476	329,867	314,163	301,269	312,492
1929	309,226	304,714	297,768	287,215	278,176	273,743	269,171	260,053	252,567	247,962	246,577	258,269
1930	253,597	249,467	247,123	253,921	257,655	297,569	289,921	276,311	266,515	260,902	262,156	277,408
1931	271,514	266,665	258,985	248,222	231,489	211,010	191,318	178,426	169,361	161,269	154,298	149,480
1932	170,342	205,765	258,539	279,305	279,333	366,308	348,106	321,141	298,268	285,253	285,477	315,997
1933	311,311	310,346	302,896	291,758	300,511	305,875	305,963	295,279	287,192	284,755	290,766	328,570
1934	317,026	315,305	314,151	302,731	285,922	269,591	255,376	242,495	233,123	225,784	219,201	210,448
1935	208,709	215,105	213,956	298,371	334,883	410,410	379,824	341,843	308,709	288,616	283,652	308,328
1936	301,269	301,269	334,974	359,609	408,948	430,879	393,601	347,590	306,461	281,500	274,045	303,233
1937	303,608	301,269	327,194	374,704	419,071	430,879	398,464	355,912	317,683	294,822	291,556	263,759
1938	271,165	258,403	284,328	231,453	335,152	430,879	395,533	341,446	293,440	270,086	262,283	291,141
1939	286,472	282,753	275,979	266,317	252,099	241,232	232,411	218,564	209,110	204,471	203,740	215,140
1940	221,288	290,352	297,290	351,129	430,893	430,879	401,275	362,056	327,177	306,599	303,032	328,570
1941	315,612	301,269	329,158	378,821	396,584	430,879	392,968	344,171	299,731	272,805	267,015	295,652
1942	257,378	254,364	314,394	356,659	349,140	430,879	395,259	344,868	298,078	270,565	270,341	297,642
1943	255,389	251,709	273,355	351,129	413,952	430,879	393,270	345,923	303,338	278,089	271,405	301,775
1944	295,484	294,569	298,135	299,784	313,851	344,090	338,787	325,829	316,413	312,081	304,148	323,276
1945	325,816	290,297	327,194	375,015	393,104	430,879	393,695	347,333	305,674	281,203	269,915	254,364
1946	261,976	296,357	355,921	409,884	430,893	430,879	400,932	362,665	329,166	308,977	306,150	328,570
1947	330,234	328,202	322,217	334,239	331,954	313,603	302,757	287,750	277,117	271,733	270,817	280,363
1948	273,015	268,168	262,093	280,578	306,781	391,382	363,969	328,454	297,500	278,863	275,118	303,653
1949	302,975	298,513	302,847	331,232	364,461	386,362	366,691	340,588	319,051	305,834	304,867	326,796
1950	304,838	301,269	327,194	374,040	395,153	430,879	390,058	340,654	296,874	271,074	231,453	231,453
1951	231,453	231,453	273,355	351,129	430,893	414,605	392,548	357,668	326,133	309,017	312,039	328,570
1952	301,269	301,269	319,236	240,437	306,213	422,935	402,000	336,987	280,754	249,343	237,515	272,020
1953	290,533	256,640	274,280	323,711	328,007	377,304	350,628	311,698	276,391	266,558	266,164	297,184
1954	290,701	290,924	321,814	357,098	389,579	370,280	353,925	328,798	307,665	295,393	297,382	328,570
1955	320,561	323,429	316,407	310,351	316,267	321,684	317,557	305,149	295,923	291,311	295,166	244,416
1956	231,453	247,430	300,244	352,094	378,019	430,879	390,001	337,012	288,610	259,917	256,507	291,115
1957	285,486	286,185	313,669	327,917	352,559	407,582	379,208	341,580	308,358	288,741	285,450	317,463
1958	303,793	301,269	327,194	354,084	363,067	430,879	388,203	333,598	282,634	258,324	248,190	269,216
1959	263,909	279,904	291,118	285,144	270,056	253,871	247,258	234,207	225,812	220,402	221,377	238,786
1960	232,698	229,318	223,486	218,101	233,654	240,245	232,803	219,504	210,027	204,456	206,368	221,868
1961	216,189	211,088	203,822	193,579	177,212	157,075	147,686	138,708	132,245	126,629	121,227	114,866
1962	107,864	118,122	161,086	210,530	244,690	307,316	304,372	291,705	282,283	276,946	281,893	317,015
1963	309,281	233,443	257,999	336,404	406,958	430,879	394,118	346,234	302,789	277,548	261,357	285,339
1964	294,264	307,786	299,953	293,402	284,965	296,806	291,722	279,064	269,853	266,274	269,471	240,437
1965	244,958	257,559	316,550	363,248	385,615	430,879	394,517	337,770	285,885	274,887	286,040	324,311
1966	334,122	349,487	357,489	346,462	336,357	316,210	320,832	311,898	304,729	302,912	314,525	328,570
1967	301,088	312,018	326,109	354,867	288,669	410,877	421,377	349,943	287,119	254,300	243,353	270,046
1968	271,378	278,137	298,519	305,284	293,512	284,208	281,614	270,209	261,556	258,046	264,352	294,909
1969	294,035	301,088	326,109	314,413	352,094	430,879	392,807	338,223	293,494	275,732	267,977	311,676
1970	231,212	231,212	280,107	329,514	362,245	406,816	381,381	344,049	310,462	291,318	284,789	301,088
1971	301,869	309,149	326,459	371,505	359,812	404,263	377,632	343,528	311,801	300,914	296,075	328,390
1972	336,623	350,339	350,558	345,059	335,175	351,410	343,856	326,275	312,826	304,961	301,897	328,390
1973	301,088	301,088	328,086	374,509	424,442	430,879	401,920	360,669	323,267	303,300	256,715	263,467
1974	252,977	282,447	319,296	371,387	399,904	430,879	393,123	353,176	313,658	288,147	275,019	293,792
1975	289,119	287,814	326,109	381,591	372,310	430,879	390,061	341,303	302,075	281,869	273,171	297,461
1976	291,261	285,995	278,056	267,483	250,359	229,638	209,148	193,037	181,860	173,467	165,890	156,172
1977	149,027	143,618	135,957	125,331	109,559	90,077	71,378	56,116	47,846	40,767	33,695	24,516
1978	17,435	12,082	4,603	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000
1979	4,000	4,000	4,000	4,000	32,780	29,369	28,485	29,590	32,594	45,271	89,740	
1980	214,485	248,696	308,806	355,651	372,653	430,879	402,696	339,373	281,221	249,759	235,632	259,350
1981	255,898	262,990	279,375	291,661	281,981	267,083	265,166	253,887	245,473	242,688	250,641	231,152
1982	245,863	231,152	270,642	292,045	374,401	430,879	386,401	323,798	264,969	239,745	236,759	243,150
1983	270,401	281,072	317,487	331,475	247,310	369,638	429,914	356,337	285,480	249,816	231,152	231,152
1984	231,152	240,075	290,357	341,601	403,854	426,473	395,139	351,060	308,618	291,248	297,350	328,390
1985	341,009	340,520	331,189	357,001	355,235	339,270	335,989	323,879	315,194	311,368	311,186	328,390
1986	310,436	236,156	272,873	351,129	407,259	430,879	389,142	337,708	293,336	269,338	262,603	286,952
1987	280,342	276,592	271,527	260,298	243,153	222,460	209,040	196,734	187,553	180,546	173,244	165,260
1988	163,113	160,368	152,392	142,699	126,566	106,923	93,751	84,728	78,462	71,607	65,296	57,475
1989	58,303	53,030	48,688	85,483	152,549	178,306	176,430	166,908	161,199	158,859	163,712	186,366

92 220 10-5501-WSIP  
 Base Case w/ 25% Limit on Early Deficiencies  
 Fish Releases - CDFG 1961 Agreement  
 Drought Planning Sequence - 1976-1977-185 TAF

Camanche Reservoir Elevation in Feet

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1921	222	225	229	235	231	235	231	225	219	216	215	219
1922	221	222	230	231	222	235	231	225	219	215	215	220
1923	219	220	222	226	232	235	230	223	216	212	211	215
1924	213	213	211	209	206	203	199	197	195	193	192	190
1925	189	194	202	211	227	234	229	223	218	214	213	216
1926	215	215	214	215	216	214	213	212	210	210	211	216
1927	217	217	221	225	229	235	230	224	217	213	212	217
1928	217	217	212	221	235	233	229	225	221	219	217	219
1929	218	218	216	215	213	212	212	210	209	208	208	210
1930	209	208	208	209	210	216	215	213	211	210	211	213
1931	212	211	210	208	205	201	197	195	193	191	190	188
1932	193	200	210	213	213	227	224	220	216	214	214	219
1933	219	218	217	215	217	218	218	216	215	214	215	221
1934	219	219	219	217	215	212	209	207	205	204	203	201
1935	201	202	202	217	222	233	229	223	218	215	214	218
1936	217	217	222	226	233	235	231	224	218	214	213	217
1937	217	217	221	228	234	235	231	225	220	216	215	211
1938	212	210	214	205	222	235	231	223	216	212	211	215
1939	215	214	213	211	209	207	205	203	201	200	200	202
1940	203	215	216	225	235	235	232	226	221	218	217	221
1941	219	217	221	228	231	235	230	224	217	212	211	216
1942	210	209	219	225	224	235	231	224	216	212	212	216
1943	209	209	212	225	233	235	230	224	217	213	212	217
1944	216	216	216	217	219	223	223	221	219	219	217	220
1945	221	215	221	228	230	235	231	224	218	214	212	209
1946	211	216	225	233	235	235	232	226	221	218	218	221
1947	221	221	220	222	222	219	217	215	213	212	212	214
1948	212	212	211	214	218	230	226	221	216	213	213	217
1949	217	217	217	222	226	230	227	223	220	218	218	221
1950	218	217	221	228	231	235	230	223	216	212	205	205
1951	205	205	212	225	235	233	230	225	221	218	219	221
1952	217	217	220	207	218	234	232	222	214	208	206	212
1953	215	210	213	220	221	228	224	219	213	211	211	216
1954	215	215	220	225	230	227	225	221	218	216	216	221
1955	220	220	219	218	219	220	220	218	216	215	216	207
1956	205	208	217	225	228	235	230	222	215	210	210	215
1957	214	215	219	221	225	232	229	223	218	215	214	219
1958	217	217	221	225	226	235	230	222	214	210	208	212
1959	211	214	215	214	212	209	208	206	204	203	203	206
1960	205	205	204	203	206	207	205	203	201	200	201	203
1961	202	201	200	198	194	190	188	186	184	183	182	180
1962	178	181	191	201	208	218	217	215	214	213	214	219
1963	218	206	210	222	232	235	231	224	217	213	210	214
1964	216	218	217	216	214	216	215	213	212	211	212	207
1965	208	210	219	226	229	235	231	223	214	213	215	221
1966	222	224	225	224	222	219	220	219	218	217	219	221
1967	217	219	221	225	215	233	234	224	215	209	207	212
1968	212	213	217	218	216	214	214	212	210	210	211	216
1969	216	217	221	219	225	235	230	223	216	213	212	219
1970	205	205	214	221	226	232	229	223	218	215	215	217
1971	217	218	221	227	226	232	228	223	219	217	216	221
1972	222	224	224	224	222	225	223	221	219	218	217	221
1973	217	217	221	228	235	235	232	226	220	217	210	211
1974	209	214	220	227	231	235	230	225	219	215	213	216
1975	215	215	221	229	228	235	230	223	217	214	212	216
1976	215	215	213	211	209	205	201	198	195	194	192	190
1977	188	187	185	183	178	172	166	160	155	151	147	140
1978	134	128	120	119	119	119	119	119	119	119	119	119
1979	119	119	119	119	119	146	144	143	144	146	154	172
1980	202	208	218	225	228	235	232	223	214	208	206	210
1981	209	211	213	215	214	211	211	209	208	207	209	205
1982	208	205	212	215	228	235	230	220	211	207	206	207
1983	212	214	219	222	208	227	235	225	214	208	205	205
1984	205	207	215	223	232	235	231	225	218	215	216	221
1985	223	223	222	225	225	223	222	220	219	219	219	221
1986	218	206	212	225	232	235	230	223	216	212	211	215
1987	214	213	212	210	207	204	201	199	197	195	194	192
1988	191	191	189	187	183	178	174	171	168	166	163	160
1989	161	158	156	171	189	195	194	192	191	191	192	196
1990	196	196	195	194	194	201	197	195	193	192	190	188

Minimum	119	119	119	119	119	119	119	119	119	119	119	119
Maximum	223	225	230	235	235	235	235	226	221	219	219	221
Average	209	209	211	215	217	221	218	214	209	207	206	208

## Total Camanche Releases in CFS

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1921	722	802	739	208	1,622	1,896	890	823	697	453	294	191
1922	122	638	225	195	3,026	2,602	998	931	804	522	339	442
1923	541	489	121	158	861	962	1,003	936	810	526	342	222
1924	114	96	120	160	236	298	271	232	167	109	115	146
1925	114	96	121	158	740	841	881	815	689	448	291	189
1926	114	96	121	158	267	357	392	343	227	147	115	146
1927	114	1,019	238	613	1,517	1,778	975	909	782	508	345	224
1928	114	96	1,471	158	602	621	662	596	470	305	386	251
1929	114	96	120	160	236	298	308	256	180	117	115	146
1930	114	96	121	158	267	357	392	343	227	147	115	146
1931	114	96	120	160	236	298	271	232	167	109	115	146
1932	114	96	121	158	518	619	660	594	467	304	197	146
1933	114	96	121	158	267	357	392	343	227	147	115	180
1934	366	127	120	160	236	298	308	256	180	117	115	146
1935	114	96	121	158	681	781	822	756	630	409	266	173
1936	298	2,518	555	670	1,746	1,583	968	901	773	502	326	212
1937	114	461	824	288	970	1,249	924	858	732	476	309	1,220
1938	161	1,431	1,807	2,478	3,063	2,339	1,134	1,064	930	604	393	255
1939	114	96	121	158	267	357	392	343	227	147	115	146
1940	114	96	1,436	264	1,833	1,043	864	798	672	436	283	352
1941	608	943	703	317	1,423	1,687	1,036	969	843	548	356	376
1942	1,429	1,100	142	322	2,470	2,125	1,106	1,038	909	591	491	495
1943	1,591	1,073	1,905	803	1,782	1,133	1,002	934	805	523	340	221
1944	114	96	121	158	267	357	392	343	227	147	348	226
1945	255	1,582	144	158	1,107	1,392	977	911	785	510	439	1,143
1946	673	253	126	158	1,196	1,030	834	768	642	417	271	265
1947	265	227	121	158	267	357	392	343	227	147	115	146
1948	114	96	121	158	650	751	791	725	599	389	253	164
1949	114	96	121	158	479	580	620	554	428	278	181	146
1950	417	848	361	416	1,170	1,439	1,028	958	824	535	3,305	4,200
1951	1,373	1,159	464	382	718	788	828	762	636	413	268	728
1952	1,463	1,351	1,167	3,148	3,257	2,905	1,374	1,302	1,165	757	492	320
1953	114	1,134	121	158	752	853	893	827	701	455	296	192
1954	114	96	121	299	488	589	629	563	437	284	184	189
1955	323	97	121	158	267	357	392	343	227	147	115	3,269
1956	3,109	1,057	334	425	2,307	1,965	1,122	1,053	922	599	389	253
1957	114	96	121	158	695	796	836	770	644	418	272	177
1958	325	1,294	1,063	1,969	2,715	2,024	1,214	1,145	1,013	658	428	278
1959	114	96	121	158	267	357	392	343	227	147	115	146
1960	114	96	121	158	267	357	392	343	227	147	115	146
1961	114	96	120	160	236	298	308	256	180	117	115	146
1962	114	96	121	158	299	400	440	374	248	220	143	146
1963	223	2,424	127	164	1,935	1,490	1,024	957	830	539	594	386
1964	114	96	121	158	267	357	392	343	227	147	115	3,580
1965	2,339	930	140	568	1,410	1,503	1,286	1,219	1,090	708	460	299
1966	290	96	121	158	267	357	392	343	227	147	115	711
1967	1,067	589	962	1,260	3,304	1,720	1,437	1,367	1,234	802	521	339
1968	114	96	121	158	267	357	392	343	227	147	115	146
1969	2,181	1,708	879	2,450	3,558	1,928	1,299	1,227	1,090	708	460	299
1970	3,386	1,139	570	168	720	821	862	795	667	434	524	835
1971	752	684	589	158	836	937	978	911	785	510	331	288
1972	247	124	155	158	380	481	521	455	329	227	320	312
1973	1,155	1,322	670	164	964	1,155	927	860	733	476	1,278	941
1974	1,426	314	980	766	1,387	1,398	1,158	1,091	964	626	407	264
1975	114	96	329	158	1,300	1,554	1,292	1,226	1,100	715	464	302
1976	114	96	120	160	236	298	271	232	167	109	115	146
1977	114	96	120	160	236	298	271	232	167	109	115	146
1978	114	96	120	160	236	298	271	232	167	109	115	146
1979	114	96	121	158	267	357	392	343	227	147	115	146
1980	121	1,887	595	353	1,473	1,437	1,265	1,198	1,071	696	452	294
1981	114	96	121	158	267	357	392	343	227	147	115	1,313
1982	1,410	3,031	1,838	3,616	2,915	1,656	1,519	1,446	1,306	848	1,222	1,722
1983	1,487	2,349	3,486	1,872	4,390	3,757	1,934	1,860	1,720	1,118	2,074	2,808
1984	1,526	1,111	446	158	910	1,011	1,051	985	859	558	416	315
1985	114	190	205	158	267	357	392	343	227	147	247	342
1986	598	5,935	2,432	495	1,821	1,384	1,074	1,003	868	564	366	238
1987	114	96	120	160	236	298	308	256	180	117	115	146
1988	114	96	120	160	236	298	271	232	167	109	115	146
1989	114	96	121	158	267	357	392	343	227	147	115	146
1990	114	96	120	160	236	298	308	256	180	117	115	146
Minimum	114	96	120	158	236	298	271	232	167	109	115	146
Maximum	3,386	5,935	3,486	3,616	4,390	3,757	1,934	1,860	1,720	1,118	3,305	4,200
Average	521	666	464	450	1,041	958	751	691	575	374	361	505

92 220 10-5501-WSIP  
 Base Case w/ 25% Limit on Early Deficiencies  
 Fish Releases - CDFG 1961 Agreement  
 Drought Planning Sequence - 1976-1977-185 TAF

Flow at Victor (Bruella Rd) CFS

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1921	701	784	714	171	1,535	1,780	771	740	643	421	275	166
1922	98	617	196	155	2,936	2,483	876	845	747	489	318	415
1923	520	470	96	121	774	846	884	853	756	495	323	197
1924	93	77	95	123	177	220	220	191	138	87	95	121
1925	93	77	96	121	653	725	762	731	635	416	271	164
1926	93	77	96	121	208	280	317	286	190	125	95	121
1927	93	1,001	212	576	1,430	1,662	856	825	728	477	325	199
1928	93	77	1,445	121	515	506	543	512	416	273	367	226
1929	93	77	95	123	177	220	233	200	143	95	95	121
1930	93	77	96	121	208	280	317	286	190	125	95	121
1931	93	77	95	123	177	220	220	191	138	87	95	121
1932	93	77	96	121	431	503	541	510	413	272	178	121
1933	93	77	96	121	208	280	317	286	190	125	95	155
1934	345	109	95	123	177	220	233	200	143	95	95	121
1935	93	77	96	121	594	666	703	672	576	377	246	147
1936	275	2,498	527	629	1,656	1,464	846	814	717	469	305	184
1937	93	443	798	251	883	1,133	806	775	678	444	290	1,194
1938	126	1,400	1,766	2,424	2,958	2,205	997	963	861	562	361	216
1939	93	77	96	121	208	280	317	286	190	125	95	121
1940	93	77	1,411	226	1,746	927	745	714	618	405	264	327
1941	587	925	677	280	1,336	1,571	917	886	789	516	337	351
1942	1,402	1,077	110	278	2,376	2,001	980	947	849	554	467	465
1943	1,564	1,050	1,873	759	1,688	1,010	876	844	745	487	316	190
1944	93	77	96	121	208	280	317	286	190	125	329	201
1945	234	1,564	118	121	1,020	1,276	858	827	731	478	419	1,118
1946	652	235	101	121	1,109	914	716	684	588	385	252	240
1947	244	209	96	121	208	280	317	286	190	125	95	121
1948	93	77	96	121	563	635	672	641	545	357	233	139
1949	93	77	96	121	392	464	501	470	374	246	161	121
1950	382	817	320	362	1,066	1,305	891	857	755	493	3,274	4,161
1951	1,352	1,140	438	345	631	672	710	679	582	382	249	702
1952	1,422	1,314	1,120	3,088	3,145	1,863	1,229	1,194	1,090	710	456	275
1953	93	1,116	96	121	665	737	774	743	647	424	277	167
1954	93	77	96	262	401	473	510	479	383	252	165	164
1955	302	78	96	121	208	280	317	286	190	125	95	3,244
1956	3,079	1,030	298	377	2,209	1,838	991	958	858	560	362	219
1957	93	77	96	121	608	680	718	687	590	387	253	151
1958	293	1,266	1,026	1,920	2,616	1,894	1,082	1,048	948	618	400	242
1959	93	77	96	121	208	280	317	286	190	125	95	121
1960	93	77	96	121	208	280	317	286	190	125	95	121
1961	93	77	95	123	177	220	233	200	143	95	95	121
1962	93	77	96	121	212	284	321	290	194	188	123	121
1963	200	2,404	100	125	1,846	1,372	903	871	774	506	574	359
1964	93	77	96	121	208	280	317	286	190	125	95	3,555
1965	2,313	907	109	525	1,317	1,381	1,161	1,129	1,030	672	437	269
1966	268	77	96	121	208	280	317	286	190	125	95	686
1967	1,034	560	923	1,209	3,203	1,588	1,302	1,269	1,167	761	492	302
1968	93	77	96	121	208	280	317	286	190	125	95	121
1969	2,140	1,672	832	2,390	3,447	1,786	1,154	1,119	1,015	661	424	254
1970	3,363	1,118	542	128	630	702	740	708	611	400	503	807
1971	731	666	563	121	749	821	859	828	731	478	312	263
1972	226	105	130	121	293	365	402	371	275	195	301	287
1973	1,132	1,302	642	125	875	1,037	806	774	677	443	1,258	914
1974	1,402	294	952	726	1,298	1,279	1,036	1,005	907	593	386	237
1975	93	77	303	121	1,213	1,439	1,173	1,142	1,046	683	445	276
1976	93	77	95	123	177	220	220	191	138	87	95	121
1977	93	77	95	123	177	220	220	191	138	87	95	121
1978	93	77	95	123	177	220	220	191	138	87	95	121
1979	93	77	96	121	208	280	317	286	190	125	95	121
1980	98	1,867	567	313	1,383	1,319	1,143	1,112	1,014	662	431	266
1981	93	77	96	121	208	280	317	286	190	125	95	1,288
1982	1,364	2,990	1,786	3,550	2,797	1,508	1,368	1,332	1,225	798	1,182	1,672
1983	1,441	2,308	3,434	1,806	4,272	3,609	1,783	1,746	1,640	1,067	2,035	2,758
1984	1,505	1,092	420	121	823	895	932	901	805	526	396	290
1985	93	172	180	121	208	280	317	286	190	125	228	317
1986	560	5,902	2,388	439	1,714	1,247	934	899	797	520	333	196
1987	93	77	95	123	177	220	233	200	143	95	95	121
1988	93	77	95	123	177	220	220	191	138	87	95	121
1989	93	77	96	121	208	280	317	286	190	125	95	121
1990	93	77	95	123	177	220	233	200	143	95	95	121
Minimum	93	77	95	121	177	220	220	191	138	87	95	121
Maximum	3,363	5,902	3,434	3,550	4,272	3,609	1,783	1,746	1,640	1,067	3,274	4,161
Average	497	645	435	409	961	854	648	616	525	344	339	477

## Flow Below Lodi Lake in CFS

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1921	655	744	656	63	1,349	1,530	482	474	467	326	237	120
1922	47	572	133	42	2,744	2,226	580	573	566	389	276	364
1923	475	430	38	13	589	596	595	587	580	399	285	151
1924	47	37	38	13	23	30	18	14	10	29	58	75
1925	47	37	38	13	467	475	474	466	459	321	234	118
1926	47	37	38	13	23	30	29	21	14	30	58	75
1927	47	960	155	468	1,245	1,412	567	559	552	381	288	153
1928	47	37	1,388	13	329	256	255	247	240	178	329	180
1929	47	37	38	13	23	30	29	21	14	37	58	75
1930	47	37	38	13	23	30	29	21	14	30	58	75
1931	47	37	38	13	23	30	18	14	10	29	58	75
1932	47	37	38	13	246	253	252	244	237	177	140	75
1933	47	37	38	13	23	30	29	21	14	30	58	109
1934	299	69	38	13	23	30	29	21	14	37	58	75
1935	47	37	38	13	408	416	415	407	400	282	209	101
1936	223	2,452	463	515	1,463	1,207	549	542	535	369	263	133
1937	47	403	741	143	698	883	517	509	502	349	252	1,148
1938	47	1,330	1,672	2,277	2,732	1,912	665	657	650	441	296	136
1939	47	37	38	13	23	30	29	21	14	30	58	75
1940	47	37	1,353	119	1,560	677	456	449	442	309	227	281
1941	542	884	619	172	1,151	1,321	628	620	613	421	299	305
1942	1,343	1,025	38	155	2,175	1,734	674	666	659	449	419	405
1943	1,506	998	1,801	637	1,487	744	570	563	555	382	268	131
1944	47	37	38	13	23	30	29	21	14	30	291	155
1945	188	1,524	61	13	835	1,026	570	562	555	383	382	1,072
1946	606	195	43	13	924	664	427	419	412	290	214	194
1947	198	169	38	13	23	30	29	21	14	30	58	75
1948	47	37	38	13	377	385	384	376	369	262	196	93
1949	47	37	38	13	206	214	213	205	198	151	124	75
1950	304	748	227	217	841	1,013	560	552	545	372	3,210	4,083
1951	1,306	1,100	381	238	445	422	421	413	406	286	212	656
1952	1,331	1,234	1,012	2,927	2,904	1,554	881	873	866	580	380	183
1953	47	1,076	38	13	480	487	486	478	471	328	239	121
1954	47	37	38	154	215	223	222	214	207	157	127	118
1955	256	38	38	13	23	30	29	21	14	30	58	3,198
1956	3,012	971	217	245	1,997	1,560	675	667	660	449	307	151
1957	47	37	38	13	423	430	429	421	414	292	215	105
1958	223	1,204	942	1,784	2,400	1,613	761	753	746	504	342	172
1959	47	37	38	13	23	30	29	21	14	30	58	75
1960	47	37	38	13	23	30	29	21	14	30	58	75
1961	47	37	38	13	23	30	29	21	14	37	58	75
1962	47	37	38	13	26	34	33	25	18	93	86	75
1963	151	2,361	38	13	1,656	1,118	609	602	595	408	533	310
1964	47	37	38	13	23	30	29	21	14	30	58	3,509
1965	2,255	856	38	403	1,117	1,116	856	849	842	568	389	211
1966	223	37	38	13	23	30	29	21	14	30	58	640
1967	961	495	836	1,070	2,984	1,303	977	969	962	645	431	228
1968	47	37	38	13	23	30	29	21	14	30	58	75
1969	2,049	1,591	725	2,229	3,206	1,477	806	798	791	531	349	162
1970	3,311	1,072	478	13	437	445	443	436	429	300	460	755
1971	686	626	505	13	564	571	570	562	555	383	275	217
1972	180	65	72	13	107	115	114	106	99	100	263	241
1973	1,083	1,259	580	13	685	782	512	504	497	345	1,217	864
1974	1,351	249	888	612	1,106	1,022	741	733	726	493	344	186
1975	47	37	245	13	1,028	1,189	885	877	870	588	408	230
1976	47	37	38	13	23	30	18	14	10	29	58	75
1977	47	37	38	13	23	30	18	14	10	29	58	75
1978	47	37	38	13	23	30	18	14	10	29	58	75
1979	47	37	38	13	23	30	29	21	14	30	58	75
1980	47	1,822	504	200	1,192	1,063	848	840	833	563	389	216
1981	47	37	38	13	23	30	29	21	14	30	58	1,242
1982	1,261	2,899	1,666	3,375	2,541	1,184	1,003	996	988	658	1,097	1,568
1983	1,338	2,217	3,313	1,631	4,016	3,285	1,418	1,410	1,403	928	1,949	2,655
1984	1,459	1,052	363	13	637	645	644	636	629	431	359	244
1985	47	132	122	13	23	30	29	21	14	30	190	271
1986	477	5,828	2,289	287	1,482	948	595	587	580	395	264	112
1987	47	37	38	13	23	30	29	21	14	37	58	75
1988	47	37	38	13	23	30	18	14	10	29	58	75
1989	47	37	38	13	23	30	29	21	14	30	58	75
1990	47	37	38	13	23	30	29	21	14	37	58	75
Minimum	47	37	38	13	23	30	18	14	10	29	58	75
Maximum	3,311	5,828	3,313	3,375	4,016	3,285	1,418	1,410	1,403	928	3,210	4,083
Average	445	599	370	294	773	605	364	356	350	250	296	425

## Flow into the Delta in CFS

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1921	647	736	647	50	1,326	1,499	453	453	453	316	229	110
1922	40	565	124	28	2,721	2,196	551	551	551	379	268	354
1923	467	423	29	0	566	566	566	566	566	389	277	141
1924	40	30	29	0	0	0	0	0	0	18	50	66
1925	40	30	29	0	444	444	444	444	444	310	225	108
1926	40	30	29	0	0	0	0	0	0	20	50	66
1927	40	953	146	455	1,222	1,382	538	538	538	371	279	143
1928	40	30	1,379	0	306	225	225	225	225	168	321	170
1929	40	30	29	0	0	0	0	0	0	26	50	66
1930	40	30	29	0	0	0	0	0	0	20	50	66
1931	40	30	29	0	0	0	0	0	0	18	50	66
1932	40	30	29	0	223	223	223	223	223	166	132	66
1933	40	30	29	0	0	0	0	0	0	20	50	99
1934	292	61	29	0	0	0	0	0	0	26	50	66
1935	40	30	29	0	385	385	385	385	385	272	200	92
1936	216	2,445	454	502	1,440	1,176	520	520	520	359	254	123
1937	40	395	732	130	675	853	488	488	488	338	244	1,139
1938	40	1,323	1,663	2,264	2,709	1,882	635	635	635	430	288	127
1939	40	30	29	0	0	0	0	0	0	20	50	66
1940	40	30	1,344	105	1,537	646	427	427	427	299	218	271
1941	534	877	610	158	1,128	1,290	599	599	599	411	291	295
1942	1,335	1,017	29	142	2,152	1,704	644	644	644	439	410	396
1943	1,498	991	1,793	623	1,464	713	541	541	541	372	259	122
1944	40	30	29	0	0	0	0	0	0	20	283	145
1945	180	1,516	52	0	812	996	540	540	540	373	373	1,062
1946	598	187	34	0	901	634	398	398	398	280	206	185
1947	191	161	29	0	0	0	0	0	0	20	50	66
1948	40	30	29	0	354	354	354	354	354	252	187	83
1949	40	30	29	0	183	183	183	183	183	141	115	66
1950	297	740	218	204	818	983	530	530	530	362	3,201	4,073
1951	1,299	1,093	372	224	422	392	392	392	392	276	203	647
1952	1,323	1,226	1,004	2,913	2,881	1,524	851	851	851	569	372	173
1953	40	1,068	29	0	457	457	457	457	457	318	231	111
1954	40	30	29	141	192	192	192	192	192	146	119	108
1955	249	30	29	0	0	0	0	0	0	20	50	3,188
1956	3,005	963	209	231	1,974	1,530	646	646	646	439	299	142
1957	40	30	29	0	400	400	400	400	400	281	207	96
1958	216	1,197	933	1,770	2,377	1,582	732	732	732	494	333	162
1959	40	30	29	0	0	0	0	0	0	20	50	66
1960	40	30	29	0	0	0	0	0	0	20	50	66
1961	40	30	29	0	0	0	0	0	0	26	50	66
1962	40	30	29	0	3	3	3	3	3	82	77	66
1963	143	2,353	29	0	1,633	1,087	580	580	580	398	524	300
1964	40	30	29	0	0	0	0	0	0	20	50	3,499
1965	2,248	848	29	390	1,094	1,085	827	827	827	558	381	201
1966	215	30	29	0	0	0	0	0	0	20	50	631
1967	953	487	827	1,056	2,961	1,272	948	948	948	634	423	218
1968	40	30	29	0	0	0	0	0	0	20	50	66
1969	2,041	1,583	716	2,215	3,183	1,447	776	776	776	521	340	153
1970	3,304	1,065	469	0	414	414	414	414	414	290	452	746
1971	678	618	496	0	541	541	541	541	541	373	266	208
1972	173	58	63	0	84	84	84	84	84	90	255	231
1973	1,075	1,251	571	0	662	752	483	483	483	335	1,208	855
1974	1,344	241	880	599	1,083	992	711	711	711	483	335	176
1975	40	30	236	0	1,005	1,158	855	855	855	577	399	221
1976	40	30	29	0	0	0	0	0	0	18	50	66
1977	40	30	29	0	0	0	0	0	0	18	50	66
1978	40	30	29	0	0	0	0	0	0	18	50	66
1979	40	30	29	0	0	0	0	0	0	20	50	66
1980	40	1,815	496	186	1,169	1,032	819	819	819	553	381	206
1981	40	30	29	0	0	0	0	0	0	20	50	1,232
1982	1,254	2,891	1,657	3,361	2,518	1,153	974	974	974	648	1,088	1,559
1983	1,330	2,209	3,304	1,617	3,993	3,254	1,389	1,389	1,389	917	1,940	2,645
1984	1,451	1,045	354	0	614	614	614	614	614	421	350	234
1985	40	124	113	0	0	0	0	0	0	20	182	261
1986	469	5,820	2,280	274	1,459	917	566	566	566	385	256	103
1987	40	30	29	0	0	0	0	0	0	26	50	66
1988	40	30	29	0	0	0	0	0	0	18	50	66
1989	40	30	29	0	0	0	0	0	0	20	50	66
1990	40	30	29	0	0	0	0	0	0	26	50	66
Minimum	40	30	29	0	0	0	0	0	0	18	50	66
Maximum	3,304	5,820	3,304	3,361	3,993	3,254	1,389	1,389	1,389	917	3,201	4,073
Average	438	591	362	281	750	575	336	336	336	240	288	415

## Pardee Reservoir Storage In Acre-Feet

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1921	169,347	136,827	125,730	103,075	190,190	209,995	196,248	189,173	187,583	191,889	192,185	182,684
1922	182,267	174,040	148,226	165,282	209,985	209,995	199,942	190,070	185,623	188,286	186,782	182,684
1923	192,256	187,498	188,716	209,995	209,985	209,995	202,446	194,840	193,436	198,970	198,585	182,684
1924	193,149	184,608	175,822	176,425	172,855	163,942	155,092	143,926	134,630	133,514	129,054	127,127
1925	192,438	192,242	209,985	209,995	209,985	209,995	196,678	188,754	188,212	192,990	193,952	182,684
1926	194,107	202,053	200,546	209,995	209,985	209,995	191,659	183,075	180,282	184,435	193,745	182,684
1927	196,182	209,960	209,985	209,995	209,985	209,995	200,543	193,241	191,236	195,086	196,940	182,684
1928	188,014	188,837	209,985	209,995	209,985	209,995	199,230	193,150	192,573	197,749	202,056	182,684
1929	175,330	169,845	170,108	179,251	186,711	189,125	181,363	177,320	176,836	182,551	186,464	182,684
1930	168,971	186,919	204,507	208,679	204,894	198,724	187,471	182,815	183,156	189,197	193,819	182,684
1931	175,406	168,208	167,914	165,653	169,190	166,233	167,421	154,659	142,249	137,992	134,539	139,399
1932	125,233	124,153	106,131	121,241	164,424	209,121	206,655	200,481	199,331	201,881	200,560	182,684
1933	182,089	165,128	167,487	193,004	209,985	209,995	196,359	190,873	190,404	195,750	194,727	182,684
1934	192,526	192,940	209,985	203,952	198,627	206,545	202,927	186,615	173,968	167,643	166,846	165,424
1935	169,291	177,578	195,974	209,995	209,985	209,995	196,923	189,416	187,893	193,404	195,167	182,684
1936	209,985	209,960	199,168	194,975	209,985	209,995	199,660	194,093	193,692	198,387	198,501	182,684
1937	182,343	209,960	209,985	205,824	209,985	209,995	194,788	188,252	186,545	190,312	189,159	182,684
1938	190,121	209,960	209,985	209,995	209,985	209,995	209,985	205,236	204,669	208,547	208,394	182,684
1939	197,026	190,014	194,251	200,539	199,627	207,602	198,381	193,392	193,305	200,839	197,977	182,684
1940	209,985	209,960	209,985	209,995	209,985	205,685	190,044	184,009	182,746	187,982	189,614	182,684
1941	193,939	209,960	204,982	198,665	209,985	209,995	200,617	194,190	193,029	196,915	195,943	182,684
1942	209,985	209,960	178,322	186,227	209,985	209,995	209,698	201,992	200,321	201,358	208,517	182,684
1943	209,985	207,273	209,985	209,995	209,985	209,995	199,304	195,425	195,318	202,002	201,678	182,684
1944	191,319	188,597	204,592	209,995	209,985	188,968	171,528	166,562	164,624	169,203	183,444	182,684
1945	183,736	209,960	209,985	196,253	209,985	209,995	189,585	180,611	177,504	179,938	180,831	182,684
1946	180,142	159,580	143,737	126,741	209,985	197,846	185,041	178,419	177,344	183,405	191,213	182,684
1947	179,318	180,176	188,874	194,474	190,925	198,583	191,064	186,530	186,259	197,457	194,729	182,684
1948	195,516	185,363	187,364	209,995	191,221	209,995	196,273	191,784	191,631	195,268	196,244	182,684
1949	187,655	178,433	190,115	200,870	209,985	200,645	191,320	185,974	185,556	189,968	193,622	182,684
1950	202,965	209,960	209,985	209,995	209,985	209,995	196,580	190,433	190,355	197,086	209,995	209,985
1951	209,985	209,960	209,985	209,995	209,985	209,995	191,242	183,695	182,296	182,564	181,983	182,684
1952	209,985	209,960	209,985	209,995	209,985	209,995	209,985	208,586	209,995	208,877	208,684	
1953	209,985	198,968	209,985	209,995	209,985	209,995	207,232	200,709	202,458	209,985	209,995	182,684
1954	195,871	208,627	209,985	209,995	209,985	209,995	190,493	183,816	185,866	192,956	199,601	182,684
1955	188,988	184,947	197,675	204,858	209,985	209,995	194,158	187,986	186,269	189,705	190,757	209,985
1956	209,985	209,960	209,985	209,995	209,985	209,995	203,292	196,218	194,361	201,473	205,138	182,684
1957	193,635	209,032	209,985	207,119	209,985	209,995	191,021	180,651	178,123	186,716	195,000	182,684
1958	205,757	209,960	209,985	209,995	209,985	209,995	209,985	209,985	209,580	209,985	209,995	182,684
1959	197,286	209,960	209,985	209,995	209,168	209,995	196,580	190,077	187,854	191,295	191,346	182,684
1960	178,912	187,543	196,076	205,138	209,985	209,995	196,187	189,051	186,480	188,796	189,648	182,684
1961	182,104	174,111	171,011	170,089	171,604	181,223	178,397	173,849	173,278	178,976	176,460	172,682
1962	168,306	203,175	187,367	195,374	186,281	209,995	196,045	191,236	190,188	199,815	201,781	182,684
1963	200,270	209,960	206,009	209,995	209,985	209,995	195,831	191,462	192,274	198,289	202,948	182,684
1964	194,739	186,859	196,478	205,003	209,985	185,336	173,605	168,850	169,682	176,970	188,306	209,985
1965	209,985	209,960	193,840	209,995	209,985	193,995	194,481	190,091	206,571	209,985	182,684	
1966	175,428	156,781	162,101	190,502	209,295	208,346	184,105	173,734	173,937	174,354	176,446	182,684
1967	209,985	197,670	209,985	209,995	209,985	209,995	209,985	205,451	207,184	209,985	209,995	182,684
1968	195,563	209,450	209,985	209,995	209,985	209,995	190,542	181,254	179,258	181,549	188,589	182,684
1969	209,985	209,960	209,985	209,995	209,985	209,995	209,985	209,985	209,985	209,985	206,541	182,684
1970	209,985	209,960	209,985	196,618	209,985	209,995	197,876	189,482	187,553	191,253	209,393	209,985
1971	207,502	199,049	207,552	204,463	204,437	209,995	206,434	209,985	209,995	209,985	204,862	182,684
1972	172,747	157,857	183,457	209,321	209,985	209,995	194,334	186,109	184,986	190,699	194,895	182,684
1973	209,985	209,960	208,066	206,948	209,985	209,995	198,367	188,842	187,314	193,391	209,995	209,985
1974	209,985	203,184	209,985	209,995	209,985	209,995	209,985	209,985	209,985	209,985	205,425	182,684
1975	184,493	199,770	209,985	194,731	208,186	209,995	208,980	209,985	209,995	209,985	209,995	182,684
1976	186,110	175,040	167,914	162,935	156,450	148,115	138,454	130,073	122,380	111,003	99,420	83,684
1977	72,731	55,817	42,849	37,708	36,928	34,259	31,424	28,454	27,082	19,082	16,802	16,800
1978	16,800	20,276	28,223	31,391	32,829	29,929	27,488	20,906	24,595	24,436	19,539	16,800
1979	22,645	38,906	88,860	136,994	192,110	209,995	203,519	196,024	180,381	177,664	183,809	182,684
1980	209,985	209,960	209,985	209,869	209,985	209,995	209,985	204,071	203,227	206,548	203,250	182,684
1981	205,755	209,505	209,985	209,995	209,985	209,995	193,164	180,563	176,162	180,881	195,210	209,985
1982	209,985	209,960	209,985	209,995	209,985	209,995	209,985	209,985	209,985	209,985	209,985	
1983	209,985	209,960	209,985	209,995	209,985	209,995	209,985	209,985	209,985	209,985	209,985	
1984	209,985	209,960	209,985	208,094	209,985	209,995	205,410	209,408	207,311	209,985	209,995	182,684
1985	164,652	167,677	199,705	209,995	200,068	201,417	182,417	176,154	176,009	182,851	191,394	182,684
1986	198,934	209,960	209,985	209,995	209,985	209,995	201,432	197,558	199,955	205,948	207,427	182,684
1987	185,891	182,192	188,748	188,394	179,702	174,887	178,352	178,022	177,113	168,270	158,255	153,971
1988	156,559	148,780	146,061	148,841	152,469	159,918	167,429	162,396	155,995	149,176	142,521	136,439
1989	123,560	116,701	161,802	204,327	209,985	209,995	197,235	189,266	189,561	184,560	191,563	182,684

92 250 10-5502-WSIP  
 No Action w/ 25% Limit on Early Deficiencies  
 Fish Releases - CDFG 1961 Agreement  
 Drought Planning Sequence - 1976-1977-185 TAF

Pardee Reservoir Elevation In Feet

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1921	548	531	523	508	559	568	561	558	557	559	560	555
1922	555	551	537	546	568	568	563	559	556	558	557	555
1923	560	557	558	568	568	568	564	561	560	563	563	555
1924	560	556	552	552	550	545	541	534	529	528	525	524
1925	528	560	568	568	568	568	562	558	558	560	560	555
1926	560	564	563	568	568	568	559	555	554	556	560	555
1927	561	568	568	568	568	568	563	560	559	561	562	555
1928	558	558	568	568	568	568	563	560	560	562	564	555
1929	551	549	549	553	557	558	554	552	552	555	557	555
1930	558	557	565	567	565	563	557	555	555	558	560	555
1931	551	548	548	546	548	547	547	540	533	531	529	532
1932	523	522	510	521	546	568	566	563	563	564	563	555
1933	555	546	547	560	568	568	561	559	559	561	561	555
1934	560	560	568	565	563	566	565	557	551	547	547	546
1935	548	552	561	568	568	568	562	558	558	560	561	555
1936	568	568	563	561	568	568	563	560	560	562	562	555
1937	555	568	568	566	568	568	561	558	557	559	558	555
1938	559	568	568	568	568	568	568	566	565	567	567	555
1939	562	559	561	563	563	567	562	560	560	564	562	555
1940	568	568	568	568	568	566	559	556	555	558	558	555
1941	560	568	565	563	568	568	563	560	560	562	561	555
1942	568	568	553	557	568	568	568	564	563	564	567	555
1943	568	566	568	568	568	568	563	561	561	564	564	555
1944	559	558	565	568	568	555	549	547	546	548	555	555
1945	555	568	568	561	568	568	558	554	552	554	554	555
1946	554	543	534	524	568	562	556	553	552	555	559	555
1947	553	554	558	561	559	563	559	557	557	562	561	555
1948	561	556	557	568	559	568	561	559	559	561	561	555
1949	557	553	559	564	568	563	559	557	556	558	560	555
1950	565	568	568	568	568	568	562	559	559	562	568	568
1951	568	568	568	568	568	568	559	555	555	555	555	555
1952	568	568	568	568	568	568	568	567	568	568	567	555
1953	568	563	568	568	568	568	566	563	564	568	568	555
1954	561	567	568	568	568	568	559	556	557	560	563	555
1955	558	556	562	565	568	568	560	558	557	558	559	568
1956	568	568	568	568	568	568	565	561	561	564	566	555
1957	560	567	568	566	568	568	559	554	553	557	561	555
1958	566	568	568	568	568	568	568	568	567	568	568	555
1959	562	568	568	568	567	568	562	559	557	559	559	555
1960	553	557	561	566	568	568	561	558	557	558	558	555
1961	555	551	549	549	549	554	553	551	550	553	552	550
1962	548	565	557	561	557	568	561	559	559	563	564	555
1963	563	568	566	568	568	568	561	559	560	562	565	555
1964	561	557	562	565	565	568	556	550	548	552	558	568
1965	568	568	560	568	568	568	561	559	566	568	568	555
1966	551	542	544	559	567	567	556	551	551	551	552	555
1967	568	562	568	568	568	568	568	566	566	568	568	555
1968	561	567	568	568	568	568	568	559	554	553	554	555
1969	568	568	568	568	568	568	568	568	568	568	566	555
1970	568	568	568	562	568	568	562	558	557	559	567	568
1971	567	563	567	565	565	568	566	568	568	568	565	555
1972	550	542	555	567	568	568	561	557	556	559	561	555
1973	568	568	567	566	568	568	562	558	557	560	568	568
1974	568	565	568	568	568	568	568	568	568	568	566	555
1975	556	563	568	561	567	568	567	568	568	568	568	555
1976	557	551	548	545	541	537	531	526	521	514	505	493
1977	483	466	449	442	440	436	431	425	422	403	397	397
1978	397	406	424	431	433	428	423	408	416	416	404	397
1979	412	444	497	530	560	568	565	561	554	553	556	555
1980	568	568	568	568	568	568	568	565	565	566	565	555
1981	566	567	568	568	568	568	560	554	552	554	561	568
1982	568	568	568	568	568	568	568	568	568	568	568	568
1983	568	568	568	568	568	568	568	568	568	568	568	568
1984	568	568	568	567	568	568	566	567	566	568	568	555
1985	546	547	563	568	563	564	555	552	552	555	559	555
1986	563	568	568	568	568	568	564	562	563	566	567	555
1987	557	555	558	558	554	551	553	552	548	542	540	
1988	541	537	536	537	539	543	547	545	541	537	534	530
1989	522	518	544	565	568	568	562	558	558	556	559	555
1990	561	559	566	568	568	550	552	550	550	554	548	543
Minimum	397	406	424	431	433	428	423	408	416	403	397	397
Maximum	568	568	568	568	568	568	568	568	568	568	568	568
Average	553	554	556	558	561	561	557	554	553	554	554	549

## Total Pardee Releases in CFS

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1921	1,100	1,095	1,077	1,059	1,086	2,198	317	180	108	79	127	374
1922	279	659	969	407	1,873	4,207	472	242	146	132	246	742
1923	404	482	293	479	1,568	1,342	345	191	115	89	149	426
1924	0	0	0	0	0	0	0	40	37	0	0	0
1925	0	0	339	940	2,455	1,654	309	176	106	77	121	346
1926	0	0	0	44	375	88	346	192	115	90	153	441
1927	150	796	607	960	1,953	2,622	353	194	117	92	157	455
1928	136	45	824	979	2,291	234	258	156	94	59	85	236
1929	10	0	0	0	29	12	216	139	84	45	49	136
1930	0	0	0	167	325	962	263	164	102	63	83	219
1931	0	0	0	0	0	0	8	135	121	0	0	0
1932	384	566	883	441	458	1,929	358	196	119	93	158	455
1933	0	41	0	0	195	420	382	206	124	101	176	526
1934	149	0	41	0	0	0	89	116	84	11	0	0
1935	0	141	0	1,229	1,250	2,030	322	182	110	81	131	377
1936	40	2,103	1,100	1,100	2,417	1,923	362	198	119	95	161	472
1937	43	153	1,022	1,100	1,615	1,426	397	212	128	106	189	557
1938	225	893	2,051	1,543	4,719	3,928	559	230	139	121	223	644
1939	1	0	0	0	0	0	218	140	85	46	53	138
1940	65	1,129	1,434	1,127	3,108	1,100	368	200	121	97	165	492
1941	314	535	1,100	1,100	1,584	2,246	419	221	133	114	205	608
1942	623	944	1,100	969	2,254	3,479	527	264	159	150	290	846
1943	734	940	2,057	2,056	2,784	1,400	391	209	126	104	184	530
1944	0	0	82	54	463	839	295	171	103	73	113	329
1945	278	738	658	943	1,361	1,994	490	249	150	138	260	780
1946	722	766	933	1,079	1,163	1,100	330	185	111	84	139	400
1947	268	154	0	324	209	0	189	129	78	37	33	80
1948	0	0	0	232	1,100	2,073	341	190	114	87	145	422
1949	73	0	46	610	929	927	295	171	103	72	110	313
1950	0	598	723	1,163	1,489	2,022	371	202	122	98	2,359	4,041
1951	1,216	1,071	1,086	1,653	1,987	498	469	241	145	131	244	732
1952	812	1,240	1,317	1,777	4,295	3,943	1,033	261	166	220	262	772
1953	321	509	345	936	793	1,651	455	235	142	153	238	642
1954	0	0	529	849	991	239	356	196	118	92	157	461
1955	60	101	0	0	259	421	318	180	109	80	127	2,060
1956	2,668	1,271	1,158	1,251	2,683	2,834	458	236	142	127	234	679
1957	0	0	450	370	1,031	1,699	372	202	121	98	168	492
1958	30	1,034	1,263	2,177	2,828	3,143	519	249	142	230	218	571
1959	0	191	265	12	0	32	265	160	97	62	87	242
1960	0	0	0	0	443	467	283	187	124	74	91	223
1961	26	0	0	0	0	0	193	206	163	58	0	0
1962	0	0	731	953	843	1,357	400	225	142	112	187	524
1963	69	907	448	1,374	3,052	1,874	426	224	135	117	214	617
1964	189	314	0	0	2	511	299	173	104	74	114	2,669
1965	2,255	1,100	1,100	1,243	1,754	2,245	695	331	199	444	573	831
1966	393	309	203	0	0	0	448	232	140	124	226	679
1967	396	743	1,070	1,571	2,197	3,739	1,606	251	152	189	274	712
1968	59	107	354	241	38	162	333	186	112	85	141	415
1969	1,925	1,577	1,211	2,188	4,148	3,230	679	331	317	379	305	899
1970	1,890	1,070	1,259	972	1,212	1,546	450	233	140	124	232	880
1971	725	784	781	890	634	1,601	542	347	230	308	225	666
1972	355	320	115	0	183	727	389	209	126	104	185	539
1973	514	1,114	983	929	1,742	1,246	461	237	143	129	259	914
1974	1,134	805	1,476	1,573	1,831	1,893	526	435	281	173	169	483
1975	12	0	753	1,100	1,100	2,488	626	412	421	338	275	653
1976	4	0	0	0	0	0	0	0	0	0	0	0
1977	0	0	0	0	0	0	0	0	0	0	0	0
1978	0	81	123	171	250	314	288	248	178	115	114	147
1979	80	3	90	168	282	713	326	126	238	153	198	452
1980	1,987	2,321	1,499	1,100	1,720	2,396	795	214	129	107	191	552
1981	0	113	271	324	72	67	345	191	115	90	152	755
1982	1,464	2,617	2,290	3,808	4,225	2,584	793	419	267	377	1,035	1,633
1983	1,667	2,355	3,761	2,031	2,985	5,784	2,911	658	504	503	1,609	2,612
1984	1,444	1,180	1,210	999	1,883	1,371	541	269	163	188	403	750
1985	295	143	0	478	244	18	329	185	111	84	139	402
1986	236	4,321	2,852	1,732	2,709	1,763	395	211	128	106	188	540
1987	0	0	0	0	0	0	16	72	50	0	0	0
1988	15	0	0	0	0	0	0	134	122	0	0	0
1989	79	0	0	322	1,281	815	399	274	198	125	158	358
1990	54	105	0	31	214	851	104	161	132	26	0	0

Minimum	0	0	0	0	0	0	0	0	0	0	0	0
Maximum	2,668	4,321	3,761	3,808	4,719	5,784	2,911	658	504	503	2,359	4,041
Average	405	580	662	762	1,271	1,377	420	212	140	119	224	599

## Camanche Reservoir Storage in Acre-Feet

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1921	339,918	363,420	390,468	430,879	404,355	430,879	395,251	356,668	324,891	304,354	296,043	311,839
1922	324,395	337,190	388,953	401,500	334,188	430,879	398,233	356,883	320,831	298,008	294,781	320,552
1923	318,998	323,732	334,860	354,331	401,894	426,713	387,092	343,514	307,132	283,443	273,884	288,445
1924	281,399	276,072	268,241	256,733	238,906	217,563	196,594	180,811	170,328	162,514	155,219	147,926
1925	143,184	142,734	158,160	204,484	324,532	385,032	360,667	333,566	312,808	299,789	296,168	308,391
1926	302,158	299,300	290,947	283,414	286,705	266,750	259,112	245,234	235,336	230,298	235,028	252,739
1927	257,358	301,269	327,194	351,129	378,049	430,879	392,345	349,552	313,383	291,085	280,380	295,229
1928	296,691	295,849	273,355	321,766	430,893	409,030	384,076	358,249	339,169	326,209	309,208	309,202
1929	304,191	299,676	292,584	281,497	265,397	245,492	235,198	223,630	214,821	208,391	203,173	202,785
1930	197,909	193,690	187,742	186,892	187,788	220,373	208,069	193,053	182,813	175,893	173,568	177,261
1931	171,126	166,168	158,424	147,447	130,682	110,396	91,266	82,613	78,080	70,363	63,478	57,880
1932	75,648	107,208	153,580	169,027	178,554	268,533	261,581	247,955	238,229	232,641	234,105	253,120
1933	248,253	245,149	237,561	226,104	219,101	219,302	214,268	201,671	192,661	188,539	190,981	218,495
1934	221,887	220,871	215,043	203,450	186,471	165,653	148,451	136,376	128,492	120,727	114,085	105,275
1935	99,917	102,551	95,962	161,944	194,445	315,125	305,569	290,699	280,165	274,215	274,272	288,505
1936	289,279	301,269	338,011	366,149	408,948	430,879	393,350	351,210	315,446	293,146	284,551	303,782
1937	302,413	301,269	327,194	378,210	417,738	430,879	398,237	359,651	326,966	306,874	302,546	263,759
1938	269,841	258,403	284,328	231,453	335,152	430,879	395,189	344,994	301,215	274,678	266,206	291,775
1939	283,362	280,526	273,668	262,083	245,092	223,704	213,752	202,436	194,208	188,238	183,516	182,667
1940	185,069	250,852	297,290	351,129	430,893	430,879	401,722	367,686	339,658	322,247	317,354	328,570
1941	317,316	301,269	332,197	385,369	395,249	430,879	392,720	347,844	308,900	284,715	277,856	295,652
1942	257,378	254,364	314,699	359,945	349,140	430,879	395,013	348,509	307,114	282,272	271,818	297,642
1943	255,389	253,071	273,355	351,129	413,952	430,879	393,024	349,564	312,372	289,233	281,572	302,411
1944	296,121	295,208	293,898	286,654	295,604	320,235	309,031	293,504	282,669	276,392	278,201	289,932
1945	299,429	290,297	325,397	370,182	388,870	430,879	400,519	360,787	326,105	306,732	297,515	281,665
1946	288,246	320,720	371,152	423,502	430,893	430,879	401,369	368,366	341,819	324,835	319,026	328,570
1947	331,936	331,054	324,040	331,768	324,581	299,340	281,790	263,865	251,607	243,969	238,481	234,095
1948	226,786	221,894	215,555	220,328	263,877	355,069	338,775	318,488	303,891	295,005	294,555	312,270
1949	309,848	305,273	305,208	329,684	361,573	384,290	365,056	343,611	328,290	317,306	314,902	324,767
1950	308,289	301,269	327,194	374,040	393,807	430,879	390,379	345,164	307,001	284,129	231,453	231,453
1951	231,453	231,453	273,355	351,129	430,893	414,660	392,350	361,385	335,343	320,976	322,949	328,570
1952	301,269	301,269	319,236	240,437	306,213	422,935	401,661	338,763	283,225	252,522	240,984	272,692
1953	287,757	258,001	271,100	316,484	323,353	373,770	347,942	314,021	285,253	270,318	269,581	299,238
1954	292,757	287,777	314,142	353,778	388,161	369,335	353,066	332,247	316,995	306,301	306,447	328,202
1955	322,266	323,242	314,723	304,736	300,867	300,661	290,980	276,130	265,567	259,160	259,269	244,416
1956	231,453	247,430	300,244	352,094	378,019	430,879	389,753	340,647	297,634	271,575	263,667	291,729
1957	285,733	281,188	304,548	315,767	343,192	400,534	374,150	342,722	317,197	301,783	298,277	320,093
1958	305,497	301,269	327,194	354,084	363,067	430,879	387,864	333,979	285,529	261,516	250,556	269,895
1959	264,591	274,102	282,180	271,741	251,961	228,972	216,670	201,227	191,494	184,298	181,453	186,842
1960	180,637	177,118	171,092	160,505	168,665	172,146	161,600	148,466	139,903	133,792	132,566	136,878
1961	131,734	126,636	119,221	108,653	92,220	72,317	62,863	57,672	55,344	50,886	43,883	34,847
1962	27,855	27,965	66,419	112,558	145,559	201,959	198,292	187,074	179,221	176,968	180,408	204,157
1963	201,425	233,443	255,109	329,881	406,958	430,879	393,771	349,682	311,559	288,960	268,404	282,286
1964	289,459	301,050	293,079	281,615	262,593	268,364	257,800	242,777	232,313	226,878	226,341	240,437
1965	244,958	257,559	316,865	363,248	385,615	430,879	394,271	341,411	291,772	278,056	288,391	324,978
1966	335,826	349,253	353,184	341,611	321,602	296,309	294,781	283,166	274,515	270,710	278,060	313,988
1967	301,088	313,379	326,109	354,867	288,669	410,877	421,034	353,482	292,342	257,398	245,615	270,614
1968	270,201	272,674	289,358	292,106	274,746	259,398	251,041	237,135	221,156	221,758	224,025	242,416
1969	294,035	301,088	326,109	314,413	352,094	430,879	392,456	338,538	295,782	278,653	271,884	312,004
1970	231,212	231,212	280,107	327,054	360,576	405,552	380,497	347,509	319,697	303,535	289,390	301,088
1971	303,571	312,000	328,541	370,022	361,261	402,687	376,289	343,320	314,247	304,445	300,881	328,390
1972	338,326	351,688	350,035	339,087	330,280	348,152	342,527	329,091	320,084	313,803	310,400	328,390
1973	301,088	301,088	328,027	371,815	423,860	430,879	401,869	364,548	332,553	315,345	256,715	263,467
1974	252,977	283,809	319,296	371,387	399,904	430,879	392,782	353,549	316,114	291,309	279,211	294,432
1975	288,015	286,707	326,109	381,047	370,763	430,879	389,730	341,547	304,435	284,960	275,443	298,051
1976	290,579	285,313	277,231	266,116	248,351	226,995	205,928	188,032	175,365	166,797	159,238	149,539
1977	142,398	136,993	129,196	118,063	101,694	81,662	62,535	46,315	35,276	28,052	21,019	11,870
1978	4,803	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000
1979	4,000	4,000	4,000	4,000	4,000	4,000	24,024	18,534	4,000	4,000	4,000	9,070
1980	149,870	248,696	308,806	355,777	372,653	430,879	402,356	342,929	290,174	256,351	242,388	259,982
1981	256,532	257,542	270,266	278,526	263,260	242,294	234,781	221,085	211,386	206,730	210,668	231,152
1982	245,863	231,152	270,642	292,045	374,401	430,879	386,073	324,237	267,621	243,194	236,759	243,150
1983	270,401	281,072	317,487	331,475	247,310	369,638	429,586	356,775	288,128	253,252	231,152	231,152
1984	231,152	240,075	290,357	338,559	401,761	424,906	393,803	351,436	313,750	294,785	297,350	327,631
1985	338,507	341,376	336,371	352,935	347,692	323,423	314,283	299,582	289,447	283,690	287,376	304,523
1986	311,844	236,156	272,873	351,129	407,259	430,879	388,889	341,314	302,294	276,405	267,342	287,420
1987	280,810	277,062	271,853	260,080	242,287	220,952	198,687	183,345	172,821	164,194	156,814	148,818
1988	144,277	138,648	130,579	120,364	103,754	83,720	64,608	56,482	52,477	44,947	38,628	30,740
1989	28,692	23,376	18,692	28,562	89,422	114,224	111,505	104,330	101,219	99,196	102,008	114,431
1990	112,025</td											

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No Action w/ 25% Limit on Early Deficiencies

Fish Releases - CDFG 1961 Agreement

Drought Planning Sequence - 1976-1977-185 TAF

## Camanche Reservoir Elevation in Feet

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1921	223	226	230	235	232	235	231	225	221	217	216	219
1922	221	222	230	232	222	235	231	225	220	216	216	220
1923	220	220	222	225	232	235	230	223	218	214	213	215
1924	214	213	212	210	207	203	199	195	193	191	190	188
1925	187	187	190	200	221	229	226	222	219	217	216	218
1926	217	217	215	214	215	211	210	208	206	205	206	209
1927	210	217	221	225	228	235	230	224	219	215	214	216
1928	216	216	212	220	235	233	229	226	223	221	218	218
1929	217	217	216	214	211	208	206	204	202	201	200	200
1930	199	198	197	197	197	203	201	198	196	194	194	194
1931	193	192	190	188	184	179	173	170	168	165	163	160
1932	167	178	189	193	195	212	210	208	206	205	206	209
1933	208	208	206	204	203	203	202	200	198	197	197	203
1934	203	203	202	200	196	192	188	185	183	181	180	177
1935	176	176	174	191	203	219	218	215	214	213	213	215
1936	215	217	223	227	233	235	230	225	219	216	214	217
1937	217	217	221	228	234	235	231	226	221	218	217	211
1938	212	210	214	205	222	235	231	224	217	213	211	215
1939	214	214	212	211	208	204	202	200	198	197	196	196
1940	196	209	216	225	235	235	232	227	223	220	219	221
1941	219	217	222	229	231	235	230	224	218	214	213	216
1942	210	209	219	226	224	235	231	224	218	214	212	216
1943	209	209	212	225	233	235	230	224	219	215	214	217
1944	216	216	216	215	216	220	218	216	214	213	213	215
1945	217	215	221	227	230	235	231	226	221	218	216	214
1946	215	220	227	235	235	235	232	227	223	221	220	221
1947	222	222	220	222	221	217	214	211	209	207	206	206
1948	204	203	202	203	211	225	223	220	217	216	216	219
1949	218	218	218	221	226	229	227	223	221	219	219	221
1950	218	217	221	228	231	235	230	224	218	214	205	205
1951	205	205	212	225	235	233	230	226	222	220	220	221
1952	217	217	220	207	218	234	232	223	214	209	207	212
1953	215	210	212	219	220	228	224	219	214	212	212	217
1954	216	215	219	225	230	227	225	222	219	218	218	221
1955	220	220	219	218	217	217	215	213	211	210	210	207
1956	205	208	217	225	228	235	230	223	216	212	211	215
1957	214	214	217	219	223	231	228	223	219	217	216	220
1958	218	217	221	225	226	235	230	222	214	210	209	212
1959	211	213	214	212	209	205	202	200	197	196	195	197
1960	195	194	193	191	193	193	191	188	186	185	184	186
1961	184	183	181	178	173	166	163	160	159	157	153	147
1962	142	142	164	179	188	200	199	197	195	194	195	200
1963	200	206	209	221	232	235	231	224	219	215	212	214
1964	215	217	216	214	211	212	210	207	205	204	204	207
1965	208	210	219	226	229	235	231	223	215	213	215	221
1966	222	224	225	223	220	216	216	214	213	212	213	219
1967	217	219	221	225	215	233	234	225	216	210	208	212
1968	212	212	215	216	213	210	209	206	204	203	204	207
1969	216	217	221	219	225	235	230	223	216	213	212	219
1970	205	205	214	221	226	232	229	224	220	217	215	217
1971	217	219	221	227	226	232	228	223	219	217	217	221
1972	223	225	224	223	221	224	223	221	220	219	218	221
1973	217	217	221	227	235	235	232	226	222	219	210	211
1974	209	214	220	227	231	235	230	225	219	215	213	216
1975	215	215	221	229	227	235	230	223	217	214	213	216
1976	215	214	213	211	208	204	200	197	194	192	191	188
1977	187	186	184	181	176	170	162	154	148	143	137	128
1978	120	119	119	119	119	119	119	119	119	119	119	119
1979	119	119	119	119	119	139	135	119	119	119	125	143
1980	189	208	218	225	228	235	232	223	215	210	207	210
1981	210	210	212	213	211	207	206	203	201	201	201	205
1982	208	205	212	215	228	235	229	221	211	207	206	207
1983	212	214	219	222	208	227	235	225	215	209	205	205
1984	205	207	215	223	232	235	231	225	219	216	216	221
1985	223	223	222	225	224	220	219	217	215	214	215	217
1986	219	206	212	225	232	235	230	223	217	213	211	215
1987	214	213	212	210	207	203	199	196	194	192	190	188
1988	187	186	184	181	177	170	163	160	158	154	150	145
1989	143	139	135	143	172	180	179	177	176	175	176	180
1990	179	179	177	175	174	183	178	176	174	172	170	166

Minimum	119	119	119	119	119	119	119	119	119	119	119	119
Maximum	223	226	230	235	235	235	235	227	223	221	220	221
Average	205	205	208	211	214	217	214	209	206	203	202	204

92 250 10-5502-WSIP  
 No Action w/ 25% Limit on Early Deficiencies  
 Fish Releases - CDFG 1961 Agreement  
 Drought Planning Sequence - 1976-1977-185 TAF

Total Camanche Releases in CFS

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1921	666	747	682	355	1,470	1,686	809	727	585	380	247	160
1922	114	529	167	167	2,923	2,517	916	834	692	472	307	383
1923	485	434	124	167	746	858	903	820	679	441	287	186
1924	114	96	123	169	246	309	281	242	173	112	115	146
1925	114	96	124	167	466	578	623	540	399	259	168	146
1926	114	96	124	167	278	368	402	352	233	151	115	146
1927	114	138	189	554	1,465	1,671	893	810	669	434	340	221
1928	114	96	1,260	167	462	534	579	496	355	231	379	246
1929	114	96	123	169	246	309	318	266	185	120	115	146
1930	114	96	124	167	278	368	402	352	233	151	115	146
1931	114	96	123	169	246	309	281	242	173	112	115	146
1932	114	96	124	167	278	368	402	352	233	151	115	146
1933	114	96	124	167	278	368	402	352	233	151	115	146
1934	114	96	123	169	246	309	318	266	185	120	115	146
1935	114	96	124	167	278	368	402	352	233	151	115	146
1936	114	2,248	506	611	1,672	1,498	886	803	662	430	279	181
1937	114	354	775	229	918	1,142	841	759	617	401	261	1,204
1938	154	1,322	1,758	2,419	2,989	2,254	1,052	966	818	531	345	224
1939	114	96	123	169	246	309	318	266	185	120	115	146
1940	114	96	744	205	1,759	1,030	755	673	531	350	227	358
1941	552	888	653	258	1,371	1,579	953	871	729	474	308	360
1942	1,373	1,045	137	217	2,397	2,039	1,024	940	797	518	484	437
1943	1,535	1,018	1,855	744	1,708	1,048	920	836	693	450	292	190
1944	114	96	124	167	278	368	402	352	233	151	115	146
1945	114	1,025	124	167	1,008	1,236	897	815	673	437	426	1,085
1946	616	198	124	167	1,002	1,030	723	641	499	330	241	241
1947	209	172	124	167	278	368	402	352	233	151	115	146
1948	114	96	124	167	370	482	527	445	303	201	130	146
1949	114	96	124	167	369	481	526	443	302	212	137	146
1950	328	792	311	357	1,118	1,331	943	858	709	461	3,298	4,142
1951	1,317	1,104	415	324	644	702	746	664	522	339	220	712
1952	1,407	1,295	1,118	3,089	3,183	1,919	1,292	1,204	1,053	684	445	289
1953	114	1,030	124	167	637	749	794	711	570	370	240	156
1954	114	96	124	167	383	495	540	458	316	228	148	146
1955	261	96	124	167	278	368	402	352	233	151	115	2,475
1956	3,053	1,002	284	366	2,233	1,880	1,040	956	810	526	342	222
1957	114	96	124	167	560	672	717	635	493	320	208	146
1958	311	1,239	1,014	1,910	2,642	1,938	1,132	1,047	901	585	380	247
1959	114	96	124	167	278	368	402	352	233	151	115	146
1960	114	96	124	167	278	368	402	352	233	151	115	146
1961	114	96	123	169	246	309	318	266	185	120	115	146
1962	114	96	124	167	278	368	402	352	233	151	115	146
1963	114	411	124	167	1,755	1,405	943	861	719	467	581	378
1964	114	96	124	167	278	368	402	352	233	151	115	2,668
1965	2,283	875	135	463	1,336	1,418	1,204	1,121	978	635	413	268
1966	244	96	124	167	278	368	402	352	233	151	115	146
1967	773	534	913	1,201	3,231	1,634	1,354	1,269	1,123	729	474	308
1968	114	96	124	167	278	368	402	352	233	151	115	146
1969	1,269	1,653	830	2,391	3,484	1,842	1,217	1,130	980	637	414	269
1970	3,336	1,083	521	167	617	729	774	692	550	357	516	777
1971	696	629	539	167	731	843	888	805	664	431	280	278
1972	191	96	124	167	278	368	402	352	233	172	259	254
1973	1,099	1,267	620	167	840	1,060	846	763	622	404	1,267	883
1974	1,370	259	931	707	1,313	1,312	1,076	993	852	553	360	234
1975	114	96	183	167	1,215	1,413	1,211	1,129	987	642	417	271
1976	114	96	123	169	246	309	281	242	173	112	115	146
1977	114	96	123	169	246	309	281	242	173	112	115	146
1978	114	96	123	169	246	309	281	242	173	112	115	146
1979	114	96	124	167	278	368	402	352	233	151	115	146
1980	114	676	546	294	1,399	1,352	1,183	1,100	959	623	405	263
1981	114	96	124	167	278	368	402	352	233	151	115	451
1982	1,354	2,975	1,789	3,557	2,841	1,571	1,437	1,347	1,192	774	1,219	1,664
1983	1,431	2,294	3,437	1,813	4,316	3,672	1,851	1,762	1,606	1,044	2,071	2,750
1984	1,470	1,056	397	167	804	917	961	879	737	479	414	269
1985	114	96	124	167	278	368	402	352	233	151	115	146
1986	158	5,874	2,382	436	1,747	1,298	992	906	757	492	319	207
1987	114	96	123	169	246	309	318	266	185	120	115	146
1988	114	96	123	169	246	309	281	242	173	112	115	146
1989	114	96	124	167	278	368	402	352	233	151	115	146
1990	114	96	123	169	246	309	318	266	185	120	115	146
Minimum	114	96	123	167	246	309	281	242	173	112	115	146
Maximum	3,336	5,874	3,437	3,557	4,316	3,672	1,851	1,762	1,606	1,044	3,298	4,142
Average	469	569	431	436	977	893	689	621	495	323	329	437

## Flow at Victor (Bruella Rd) CFS

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1921	645	729	654	308	1,345	1,520	637	606	509	338	228	135
1922	93	510	139	121	2,798	2,351	744	713	616	430	288	358
1923	464	415	96	121	621	693	730	699	603	398	267	161
1924	93	77	95	123	177	220	220	191	138	89	95	121
1925	93	77	96	121	341	412	450	419	322	216	149	121
1926	93	77	96	121	208	280	317	286	190	128	95	121
1927	93	120	161	508	1,340	1,505	720	689	593	392	321	196
1928	93	77	1,232	121	337	369	406	375	279	188	360	221
1929	93	77	95	123	177	220	233	200	143	97	95	121
1930	93	77	96	121	208	280	317	286	190	128	95	121
1931	93	77	95	123	177	220	220	191	138	89	95	121
1932	93	77	96	121	208	280	317	286	190	128	95	121
1933	93	77	96	121	208	280	317	286	190	128	95	121
1934	93	77	95	123	177	220	233	200	143	97	95	121
1935	93	77	96	121	208	280	317	286	190	128	95	121
1936	93	2,229	478	564	1,547	1,333	713	682	586	387	260	156
1937	93	336	747	183	793	976	669	638	541	358	241	1,179
1938	121	1,292	1,716	2,358	2,849	2,073	864	830	729	479	316	187
1939	93	77	95	123	177	220	233	200	143	97	95	121
1940	93	77	716	158	1,634	865	582	551	455	307	208	332
1941	531	869	625	212	1,246	1,414	781	750	653	431	289	335
1942	1,348	1,023	105	167	2,267	1,869	846	815	717	472	461	408
1943	1,510	996	1,824	694	1,578	878	743	711	613	405	270	161
1944	93	77	96	121	208	280	317	286	190	128	95	121
1945	93	1,007	96	121	883	1,070	724	693	597	395	407	1,060
1946	595	180	96	121	877	865	550	519	423	287	222	216
1947	188	154	96	121	208	280	317	286	190	128	95	121
1948	93	77	96	121	245	317	354	323	227	158	111	121
1949	93	77	96	121	244	316	353	322	226	169	118	121
1950	295	763	271	297	978	1,150	755	722	621	409	3,269	4,105
1951	1,296	1,085	387	277	519	536	574	543	446	297	201	687
1952	1,368	1,261	1,070	3,022	3,036	1,731	1,096	1,061	958	628	411	246
1953	93	1,011	96	121	512	584	621	590	494	327	221	131
1954	93	77	96	121	258	330	368	336	240	185	129	121
1955	240	77	96	121	208	280	317	286	190	128	95	2,450
1956	3,025	977	249	311	2,099	1,705	858	826	727	478	317	190
1957	93	77	96	121	435	507	544	513	417	278	189	121
1958	282	1,213	977	1,854	2,506	1,762	948	915	816	536	354	213
1959	93	77	96	121	208	280	317	286	190	128	95	121
1960	93	77	96	121	208	280	317	286	190	128	95	121
1961	93	77	95	123	177	220	233	200	143	97	95	121
1962	93	77	96	121	208	280	317	286	190	128	95	121
1963	93	392	96	121	1,630	1,239	771	740	643	425	562	352
1964	93	77	96	121	208	280	317	286	190	128	95	2,643
1965	2,259	853	103	413	1,207	1,249	1,027	996	898	590	391	240
1966	223	77	96	121	208	280	317	286	190	128	95	121
1967	743	507	875	1,144	3,094	1,457	1,170	1,137	1,037	680	447	274
1968	93	77	96	121	208	280	317	286	190	128	95	121
1969	1,232	1,620	785	2,327	3,340	1,657	1,024	990	887	582	382	228
1970	3,315	1,065	493	121	492	564	601	570	474	315	497	751
1971	675	611	511	121	606	678	715	684	588	388	261	253
1972	170	77	96	121	208	280	317	286	190	148	239	228
1973	1,078	1,249	592	121	715	895	673	642	546	361	1,248	858
1974	1,348	241	903	660	1,188	1,147	903	872	776	511	340	208
1975	93	77	155	121	1,090	1,248	1,039	1,008	911	599	398	246
1976	93	77	95	123	177	220	220	191	138	89	95	121
1977	93	77	95	123	177	220	220	191	138	89	95	121
1978	93	77	95	123	177	220	220	191	138	89	95	121
1979	93	77	96	121	208	280	317	286	190	128	95	121
1980	93	658	518	248	1,274	1,186	1,010	979	882	580	385	238
1981	93	77	96	121	208	280	317	286	190	128	95	426
1982	1,308	2,935	1,734	3,481	2,685	1,373	1,232	1,195	1,089	713	1,179	1,614
1983	1,385	2,253	3,382	1,737	4,160	3,474	1,646	1,610	1,504	982	2,031	2,700
1984	1,449	1,037	369	121	679	751	789	758	661	436	395	244
1985	93	77	96	121	208	280	317	286	190	128	95	121
1986	124	5,844	2,340	375	1,606	1,116	802	768	667	439	289	169
1987	93	77	95	123	177	220	233	200	143	97	95	121
1988	93	77	95	123	177	220	220	191	138	89	95	121
1989	93	77	96	121	208	280	317	286	190	128	95	121
1990	93	77	95	123	177	220	233	200	143	97	95	121
Minimum	93	77	95	121	177	220	220	191	138	89	95	121
Maximum	3,315	5,844	3,382	3,481	4,160	3,474	1,646	1,610	1,504	982	3,269	4,105
Average	446	548	401	388	873	759	554	522	432	287	307	410

92 250 10-5502-WSIP  
 No Action w/ 25% Limit on Early Deficiencies  
 Fish Releases - CDFG 1961 Agreement  
 Drought Planning Sequence - 1976-1977-185 TAF

Flow Below Lodi Lake in CFS

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1921	599	689	596	201	1,159	1,271	348	340	333	242	190	89
1922	47	470	82	13	2,612	2,101	455	447	440	334	250	312
1923	418	375	38	13	435	443	442	434	427	303	230	115
1924	47	37	38	13	23	30	18	14	10	31	58	75
1925	47	37	38	13	155	163	161	154	146	121	111	75
1926	47	37	38	13	23	30	29	21	14	32	58	75
1927	47	80	103	400	1,154	1,255	431	424	417	296	283	150
1928	47	37	1,174	13	152	119	118	110	103	93	322	175
1929	47	37	38	13	23	30	29	21	14	39	58	75
1930	47	37	38	13	23	30	29	21	14	32	58	75
1931	47	37	38	13	23	30	18	14	10	31	58	75
1932	47	37	38	13	23	30	29	21	14	32	58	75
1933	47	37	38	13	23	30	29	21	14	32	58	75
1934	47	37	38	13	23	30	29	21	14	39	58	75
1935	47	37	38	13	23	30	29	21	14	32	58	75
1936	47	2,189	420	456	1,361	1,083	424	417	410	292	222	110
1937	47	296	689	75	608	726	380	372	365	263	204	1,133
1938	47	1,227	1,628	2,217	2,629	1,786	538	530	523	362	255	113
1939	47	37	38	13	23	30	29	21	14	39	58	75
1940	47	37	658	51	1,448	615	294	286	279	212	171	286
1941	486	829	567	104	1,061	1,164	492	484	477	336	251	289
1942	1,294	976	38	49	2,071	1,608	547	539	532	370	416	354
1943	1,456	949	1,757	577	1,383	618	443	436	429	303	226	107
1944	47	37	38	13	23	30	29	21	14	32	58	75
1945	47	966	38	13	697	820	436	428	421	299	369	1,014
1946	550	140	38	13	691	615	262	254	247	192	185	170
1947	142	114	38	13	23	30	29	21	14	32	58	75
1948	47	37	38	13	59	67	66	58	51	63	74	75
1949	47	37	38	13	58	66	64	57	50	74	81	75
1950	222	699	183	157	759	865	431	423	416	293	3,208	4,032
1951	1,250	1,045	329	169	333	286	285	277	270	201	164	641
1952	1,282	1,185	968	2,867	2,800	1,428	754	746	739	501	339	159
1953	47	971	38	13	326	334	332	325	318	232	184	85
1954	47	37	38	13	73	80	79	71	64	90	91	75
1955	194	37	38	13	23	30	29	21	14	32	58	2,404
1956	2,963	922	173	185	1,894	1,434	548	540	533	370	266	128
1957	47	37	38	13	249	257	256	248	241	182	151	75
1958	216	1,155	897	1,723	2,296	1,486	634	626	619	426	300	148
1959	47	37	38	13	23	30	29	21	14	32	58	75
1960	47	37	38	13	23	30	29	21	14	32	58	75
1961	47	37	38	13	23	30	29	21	14	39	58	75
1962	47	37	38	13	23	30	29	21	14	32	58	75
1963	47	352	38	13	1,445	990	482	474	467	329	524	306
1964	47	37	38	13	23	30	29	21	14	32	58	2,597
1965	2,206	807	38	297	1,013	990	730	722	715	489	347	187
1966	178	37	38	13	23	30	29	21	14	32	58	75
1967	676	448	794	1,012	2,882	1,179	853	845	838	568	392	206
1968	47	37	38	13	23	30	29	21	14	32	58	75
1969	1,151	1,548	688	2,177	3,111	1,361	688	680	673	459	314	146
1970	3,269	1,025	435	13	306	314	313	305	298	219	459	705
1971	630	571	454	13	420	428	426	419	412	293	223	207
1972	124	37	38	13	23	30	29	21	14	53	202	182
1973	1,032	1,209	535	13	530	645	384	377	370	266	1,210	812
1974	1,303	201	845	553	1,003	897	614	607	600	415	303	162
1975	47	37	97	13	905	998	750	742	735	504	360	200
1976	47	37	38	13	23	30	18	14	10	31	58	75
1977	47	37	38	13	23	30	18	14	10	31	58	75
1978	47	37	38	13	23	30	18	14	10	31	58	75
1979	47	37	38	13	23	30	29	21	14	32	58	75
1980	47	618	460	140	1,088	937	721	714	707	485	348	192
1981	47	37	38	13	23	30	29	21	14	32	58	380
1982	1,205	2,844	1,614	3,307	2,429	1,049	867	859	852	573	1,094	1,510
1983	1,282	2,162	3,262	1,563	3,904	3,150	1,282	1,274	1,267	842	1,946	2,597
1984	1,403	997	311	13	494	501	500	492	485	341	357	198
1985	47	37	38	13	23	30	29	21	14	32	58	75
1986	47	5,776	2,248	231	1,383	826	473	465	458	320	226	92
1987	47	37	38	13	23	30	29	21	14	39	58	75
1988	47	37	38	13	23	30	18	14	10	31	58	75
1989	47	37	38	13	23	30	29	21	14	32	58	75
1990	47	37	38	13	23	30	29	21	14	39	58	75
Minimum	47	37	38	13	23	30	18	14	10	31	58	75
Maximum	3,269	5,776	3,262	3,307	3,904	3,150	1,282	1,274	1,267	842	3,208	4,032
Average	395	503	337	273	687	513	273	266	259	194	266	358

## Flow into the Delta in CFS

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1921	591	681	588	187	1,136	1,240	319	319	319	232	182	80
1922	40	463	73	0	2,589	2,071	426	426	426	324	242	302
1923	411	368	29	0	412	412	412	412	412	293	221	105
1924	40	30	29	0	0	0	0	0	0	20	50	66
1925	40	30	29	0	132	132	132	132	132	111	103	66
1926	40	30	29	0	0	0	0	0	0	22	50	66
1927	40	72	94	387	1,131	1,225	402	402	402	286	275	140
1928	40	30	1,165	0	129	88	88	88	88	82	314	165
1929	40	30	29	0	0	0	0	0	0	29	50	66
1930	40	30	29	0	0	0	0	0	0	22	50	66
1931	40	30	29	0	0	0	0	0	0	20	50	66
1932	40	30	29	0	0	0	0	0	0	22	50	66
1933	40	30	29	0	0	0	0	0	0	22	50	66
1934	40	30	29	0	0	0	0	0	0	29	50	66
1935	40	30	29	0	0	0	0	0	0	22	50	66
1936	40	2,182	411	443	1,338	1,052	395	395	395	282	214	101
1937	40	288	680	62	585	696	351	351	351	253	195	1,123
1938	40	1,219	1,619	2,204	2,606	1,755	508	508	508	352	246	103
1939	40	30	29	0	0	0	0	0	0	29	50	66
1940	40	30	649	37	1,425	584	264	264	264	202	162	277
1941	478	822	559	90	1,038	1,133	463	463	463	326	243	279
1942	1,286	968	29	36	2,048	1,578	517	517	517	360	408	344
1943	1,449	942	1,748	563	1,360	587	414	414	414	293	218	98
1944	40	30	29	0	0	0	0	0	0	22	50	66
1945	40	959	29	0	674	790	406	406	406	289	361	1,004
1946	542	132	29	0	668	584	233	233	233	181	176	161
1947	134	106	29	0	0	0	0	0	0	22	50	66
1948	40	30	29	0	36	36	36	36	36	53	65	66
1949	40	30	29	0	35	35	35	35	35	63	72	66
1950	215	691	174	144	736	834	401	401	401	282	3,200	4,022
1951	1,243	1,037	320	156	310	256	256	256	256	191	155	631
1952	1,274	1,177	959	2,853	2,777	1,398	724	724	724	491	330	150
1953	40	963	29	0	303	303	303	303	303	222	175	75
1954	40	30	29	0	50	50	50	50	50	80	83	66
1955	187	30	29	0	0	0	0	0	0	22	50	2,394
1956	2,955	914	164	171	1,871	1,404	519	519	519	360	257	118
1957	40	30	29	0	226	226	226	226	226	172	143	66
1958	209	1,147	889	1,710	2,273	1,456	604	604	604	415	291	138
1959	40	30	29	0	0	0	0	0	0	22	50	66
1960	40	30	29	0	0	0	0	0	0	22	50	66
1961	40	30	29	0	0	0	0	0	0	29	50	66
1962	40	30	29	0	0	0	0	0	0	22	50	66
1963	40	345	29	0	1,422	959	453	453	453	319	516	297
1964	40	30	29	0	0	0	0	0	0	22	50	2,587
1965	2,199	799	29	284	990	959	700	700	700	479	339	177
1966	170	30	29	0	0	0	0	0	0	22	50	66
1967	668	440	785	998	2,859	1,149	824	824	824	558	383	197
1968	40	30	29	0	0	0	0	0	0	22	50	66
1969	1,143	1,541	679	2,164	3,088	1,330	659	659	659	449	306	137
1970	3,261	1,017	426	0	283	283	283	283	283	209	451	696
1971	622	563	445	0	397	397	397	397	397	283	215	198
1972	116	30	29	0	0	0	0	0	0	43	193	173
1973	1,025	1,201	526	0	507	614	355	355	355	256	1,202	802
1974	1,295	193	836	539	980	867	585	585	585	405	294	153
1975	40	30	88	0	882	967	721	721	721	493	352	190
1976	40	30	29	0	0	0	0	0	0	20	50	66
1977	40	30	29	0	0	0	0	0	0	20	50	66
1978	40	30	29	0	0	0	0	0	0	20	50	66
1979	40	30	29	0	0	0	0	0	0	22	50	66
1980	40	610	451	126	1,065	906	692	692	692	475	339	182
1981	40	30	29	0	0	0	0	0	0	22	50	370
1982	1,197	2,836	1,605	3,293	2,406	1,018	838	838	838	563	1,085	1,501
1983	1,274	2,154	3,253	1,549	3,881	3,120	1,253	1,253	1,253	832	1,937	2,587
1984	1,395	990	302	0	471	471	471	471	471	331	349	188
1985	40	30	29	0	0	0	0	0	0	22	50	66
1986	40	5,769	2,240	217	1,360	795	443	443	443	309	217	83
1987	40	30	29	0	0	0	0	0	0	29	50	66
1988	40	30	29	0	0	0	0	0	0	20	50	66
1989	40	30	29	0	0	0	0	0	0	22	50	66
1990	40	30	29	0	0	0	0	0	0	29	50	66

Minimum	40	30	29	0	0	0	0	0	0	20	50	66
Maximum	3,261	5,769	3,253	3,293	3,881	3,120	1,253	1,253	1,253	832	3,200	4,022
Average	388	496	328	260	664	482	245	245	245	184	257	349

## Pardee Reservoir Storage In Acre-Feet

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1921	173,818	147,139	138,296	119,828	209,985	209,995	196,417	193,693	195,884	201,481	201,769	182,684
1922	183,487	175,993	148,636	166,164	209,985	209,995	200,111	194,590	193,269	197,574	196,152	182,684
1923	193,476	189,445	189,120	209,995	209,985	209,995	202,614	199,053	195,961	197,485	199,870	182,684
1924	195,798	191,055	186,768	192,106	181,317	165,688	150,618	135,609	121,462	112,589	112,507	114,825
1925	124,500	188,446	209,985	209,995	209,985	209,995	196,154	179,467	164,811	152,934	165,840	180,475
1926	194,939	206,962	209,985	209,995	209,985	206,842	189,318	184,514	179,707	179,583	192,499	182,684
1927	197,402	209,960	209,985	209,995	209,985	209,995	200,712	197,495	193,746	193,614	198,236	182,684
1928	189,234	190,786	209,985	209,995	209,985	209,995	199,399	192,521	186,300	182,951	193,348	182,684
1929	176,550	175,134	180,227	194,456	198,196	189,125	181,531	181,514	180,595	182,769	189,024	182,684
1930	193,187	194,980	209,985	209,995	207,622	199,554	188,300	178,644	169,185	162,545	176,238	182,684
1931	177,705	172,604	174,792	175,143	167,775	154,097	145,302	130,327	114,368	100,382	99,334	106,422
1932	96,752	100,044	87,002	133,509	174,439	209,995	206,824	198,048	188,442	180,277	186,774	182,684
1933	186,558	169,921	177,105	207,699	209,985	209,995	196,527	194,276	190,905	191,290	193,784	182,684
1934	193,745	195,019	209,985	208,167	194,215	193,935	188,041	171,022	154,903	140,531	143,584	145,933
1935	153,070	164,264	187,471	209,995	209,985	209,995	196,804	180,458	164,615	153,347	167,547	182,684
1936	209,985	209,960	203,991	204,889	209,985	209,995	199,828	198,430	196,268	197,001	199,860	182,684
1937	183,564	209,960	209,985	209,995	209,985	209,995	194,957	192,772	191,853	194,443	194,657	182,684
1938	191,341	209,960	209,985	209,995	209,985	209,995	209,985	197,612	182,730	170,557	182,332	182,684
1939	198,246	192,785	201,850	209,995	202,281	204,025	195,701	193,721	191,804	194,580	195,687	182,684
1940	209,985	209,960	209,985	209,995	209,985	209,995	193,644	191,602	188,783	190,333	193,773	182,684
1941	195,159	209,960	209,809	208,592	209,985	209,995	200,786	198,710	198,777	202,039	202,182	182,684
1942	209,985	209,960	183,146	190,422	209,985	209,995	209,867	206,513	204,209	203,428	209,995	182,684
1943	209,985	208,154	209,985	209,995	209,985	209,995	199,473	198,985	196,048	197,873	200,982	182,684
1944	195,786	197,149	209,949	209,995	209,985	182,968	171,696	170,470	166,974	167,455	184,531	182,684
1945	184,955	209,960	209,985	196,828	209,985	209,995	189,754	185,130	183,644	186,387	188,072	182,684
1946	181,361	161,529	144,143	132,080	209,985	204,698	190,666	187,825	190,111	197,170	203,942	182,684
1947	180,537	182,123	192,204	197,543	194,819	198,865	191,458	191,251	191,523	200,015	199,045	182,684
1948	199,979	193,900	200,746	209,995	197,546	209,995	196,442	185,613	173,434	162,702	174,248	182,684
1949	188,875	182,201	191,890	202,774	209,985	200,645	191,488	185,426	179,045	174,873	184,705	182,684
1950	207,435	209,960	209,985	209,995	209,985	209,995	196,749	193,481	190,259	191,745	209,995	209,985
1951	209,985	209,960	209,985	209,995	209,985	209,995	191,410	188,215	186,716	185,404	186,514	182,684
1952	209,985	209,960	209,985	209,995	209,985	209,995	209,985	202,379	190,589	180,106	188,881	182,684
1953	209,985	199,848	209,985	209,995	209,985	209,995	207,400	204,472	202,948	207,273	209,995	182,684
1954	200,337	209,960	209,985	209,995	209,985	209,995	190,662	187,942	188,055	190,969	200,510	182,684
1955	190,209	186,896	200,533	209,995	209,985	209,995	194,327	192,506	190,200	190,566	193,802	209,985
1956	209,985	209,960	209,985	209,995	209,985	209,995	203,461	200,566	195,981	198,779	205,518	182,684
1957	196,232	209,960	209,985	207,695	209,985	209,995	191,189	182,264	175,131	177,021	190,135	182,684
1958	206,977	209,960	209,985	209,995	209,985	209,995	209,985	209,985	206,766	209,155	209,995	182,684
1959	201,721	209,960	209,985	209,995	200,774	195,697	185,364	181,262	176,518	174,611	181,250	182,684
1960	182,935	195,240	208,126	209,995	209,985	209,995	196,159	183,014	169,581	157,684	168,176	179,085
1961	180,083	175,245	175,888	178,914	164,513	158,634	152,606	145,607	139,034	132,567	133,705	133,477
1962	133,032	171,326	162,407	177,253	176,087	209,995	196,214	189,025	179,503	178,594	188,279	182,684
1963	201,490	209,960	204,952	209,995	209,985	209,995	196,000	195,652	193,890	195,566	203,303	182,684
1964	195,959	188,807	203,248	209,995	207,206	185,336	173,774	172,661	171,804	174,892	189,146	209,985
1965	209,985	209,960	198,664	209,995	209,985	209,995	194,650	194,613	190,995	209,985	209,995	182,684
1966	176,648	158,730	162,506	195,659	209,985	205,938	182,356	176,537	181,464	184,974	186,817	182,684
1967	209,985	198,550	209,985	209,995	209,985	209,995	209,985	209,820	209,163	209,985	209,995	182,684
1968	196,783	209,960	209,985	209,995	206,962	209,995	190,711	185,774	185,125	186,416	194,643	182,684
1969	209,985	209,960	209,985	209,995	209,985	209,995	209,985	209,985	209,995	209,985	208,940	182,684
1970	209,985	209,960	209,985	197,194	209,985	209,995	198,045	192,922	187,422	185,926	207,790	209,985
1971	208,721	200,996	207,958	205,343	206,875	209,995	206,603	209,985	209,995	209,985	207,261	182,684
1972	173,966	159,806	183,861	209,995	209,985	209,995	194,503	190,629	193,185	200,548	204,691	182,684
1973	209,985	209,960	207,009	206,732	209,985	209,995	198,536	193,362	192,529	197,802	209,995	209,985
1974	209,985	204,065	209,985	209,995	209,985	209,995	209,985	209,985	209,995	209,985	207,823	182,684
1975	185,713	204,432	209,985	199,828	209,985	209,995	209,149	209,985	209,995	209,985	209,995	182,684
1976	187,329	179,969	177,237	176,894	165,996	153,722	140,582	128,623	116,614	100,372	93,059	81,498
1977	74,116	60,457	51,345	50,248	53,840	55,851	57,981	59,832	62,721	58,974	54,612	43,906
1978	35,947	37,938	45,183	47,958	49,319	40,320	36,464	27,605	28,409	28,252	19,541	16,800
1979	22,504	38,090	87,426	135,276	174,740	202,052	182,639	159,111	143,083	128,368	149,221	179,332
1980	209,985	209,960	209,985	209,995	209,985	209,995	209,985	208,440	206,943	207,613	206,445	182,684
1981	209,985	209,960	209,985	209,995	207,852	205,865	190,045	182,138	178,070	180,875	197,606	209,985
1982	209,985	209,960	209,985	209,995	209,985	209,995	209,985	209,985	209,995	205,572	207,537	209,995
1983	209,985	209,960	209,985	209,995	209,985	209,995	209,985	209,985	209,995	209,985	209,995	209,985
1984	209,985	209,960	209,985	208,669	209,985	209,995	205,579	209,985	207,655	209,985	209,995	182,684
1985	165,871	169,625	203,227	209,995	201,921	201,417	182,586	180,674	184,922	193,792	202,008	182,684
1986	200,154	209,960	209,985	209,995	209,995	209,995	201,601	198,491	195,433	193,967	200,849	182,684
1987	190,184	190,405	201,616	206,134	189,230	176,729	174,044	170,884	164,871	147,175	141,667	141,768
1988	146,783	141,308	142,382	149,166	141,638	138,346	135,601	128,476	118,392	100,516	97,516	94,986
1989	87,474	83,809	132,650	183,071	209,985	209,995	196,568	180,168	166,348	143,0		

## Pardee Reservoir Elevation In Feet

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1921	551	536	531	520	568	568	562	560	561	564	564	555
1922	555	552	537	547	568	568	563	561	560	562	561	555
1923	560	558	558	568	568	568	564	563	561	562	563	555
1924	561	559	557	560	554	546	538	529	521	515	515	516
1925	523	558	568	568	568	568	561	553	546	539	546	554
1926	561	566	568	568	568	566	558	556	554	553	560	555
1927	562	568	568	568	568	568	563	562	560	560	562	555
1928	558	559	568	568	568	568	563	560	557	555	560	555
1929	552	551	554	561	562	558	554	554	554	555	558	555
1930	560	561	568	568	567	563	558	553	548	545	552	555
1931	553	550	551	551	547	540	535	526	516	506	505	511
1932	503	506	496	528	551	568	566	562	558	554	557	555
1933	557	549	552	567	568	568	562	561	559	559	560	555
1934	560	561	568	567	560	560	558	549	541	532	534	536
1935	540	546	557	568	568	568	562	554	546	540	547	555
1936	568	568	565	565	568	568	563	562	561	562	563	555
1937	555	568	568	568	568	568	561	560	559	561	561	555
1938	559	568	568	568	568	568	568	562	555	549	555	555
1939	562	560	564	568	564	565	561	560	559	561	561	555
1940	568	568	568	568	568	568	560	559	558	559	560	555
1941	561	568	568	567	568	568	564	563	563	564	564	555
1942	568	568	555	559	568	568	568	566	565	565	568	555
1943	568	567	568	568	568	568	563	563	561	562	564	555
1944	561	562	568	568	568	555	549	549	547	547	556	555
1945	556	568	568	562	568	568	558	556	555	557	558	555
1946	554	544	535	527	568	565	559	557	559	562	565	555
1947	554	555	560	562	561	563	559	559	559	563	563	555
1948	563	560	564	568	562	568	562	556	550	545	551	555
1949	558	555	559	564	568	563	559	556	553	551	556	555
1950	567	568	568	568	568	568	562	560	559	559	568	568
1951	568	568	568	568	568	568	559	558	557	556	557	555
1952	568	568	568	568	568	568	568	564	559	554	558	555
1953	568	563	568	568	568	568	567	565	565	566	568	555
1954	563	568	568	568	568	568	559	558	558	559	563	555
1955	559	557	563	568	568	568	561	560	559	559	560	568
1956	568	568	568	568	568	568	565	563	561	563	566	555
1957	561	568	568	567	568	568	559	555	551	552	559	555
1958	566	568	568	568	568	568	568	568	566	567	568	555
1959	564	568	568	568	564	561	556	554	552	551	554	555
1960	555	561	567	568	568	568	561	555	548	542	548	553
1961	554	551	552	553	546	543	539	535	532	528	528	528
1962	528	549	545	552	552	568	561	558	553	553	558	555
1963	564	568	565	568	568	568	561	561	560	561	565	555
1964	561	558	565	568	566	556	551	550	550	551	558	568
1965	568	568	563	568	568	568	561	561	568	568	568	555
1966	552	543	545	561	568	566	555	552	554	556	557	555
1967	568	563	568	568	568	568	568	568	567	568	568	555
1968	562	568	568	568	566	568	559	556	556	557	561	555
1969	568	568	568	568	568	568	568	568	568	567	567	555
1970	568	568	568	562	568	568	562	560	557	557	567	568
1971	567	564	567	566	566	568	566	568	568	568	566	555
1972	551	543	556	568	568	568	561	559	560	563	565	555
1973	568	568	566	566	568	568	563	560	560	562	568	568
1974	568	565	568	568	568	568	568	568	568	568	567	555
1975	556	565	568	563	568	568	567	568	568	568	568	555
1976	557	554	552	552	547	540	532	525	517	506	501	491
1977	485	471	460	459	463	466	468	470	473	469	464	451
1978	439	442	453	456	458	446	440	423	425	424	404	397
1979	412	442	496	529	551	564	555	543	534	525	537	533
1980	568	568	568	568	568	568	568	567	566	567	566	555
1981	568	568	568	568	567	566	559	555	553	554	562	568
1982	568	568	568	568	568	568	568	568	566	567	568	568
1983	568	568	568	568	568	568	568	568	568	568	568	568
1984	568	568	568	567	568	568	566	568	567	568	568	555
1985	546	548	565	568	564	564	555	554	556	560	564	555
1986	563	568	568	568	568	568	564	562	561	560	564	555
1987	559	559	564	566	558	552	551	549	546	536	533	533
1988	536	533	533	537	533	531	529	525	519	506	504	502
1989	496	493	528	555	568	568	562	554	547	534	545	553
1990	560	559	566	568	565	550	546	540	533	528	522	518

Minimum	412	442	453	456	458	446	440	423	425	424	404	397
Maximum	568	568	568	568	568	568	568	568	568	568	568	568
Average	553	554	557	559	562	561	556	554	551	550	552	548

92 190 10-9948-WSIP

**Composite Program I - GFS Eqs for Maint. of Camanche Hypoli**  
**Fish Releases per Production Goal Faxed 1-2-92 w/Ramping**  
**Drought Planning Sequence - 1976-1977-185 TAF**

**Total Pardee Releases in CFS**

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1921	1,100	1,100	1,086	1,074	1,138	2,645	434	227	152	147	205	605
1922	332	718	1,073	485	1,990	4,322	590	289	200	194	324	969
1923	457	541	397	572	1,670	1,458	462	243	251	243	181	521
1924	24	0	0	0	209	216	209	209	216	209	0	0
1925	0	0	355	1,026	2,558	1,769	437	437	452	437	0	0
1926	23	0	4	288	478	256	454	248	256	248	171	495
1927	203	890	685	1,045	2,056	2,737	470	245	253	245	189	551
1928	189	104	934	1,064	2,394	350	375	287	297	287	61	169
1929	63	0	0	0	192	320	333	192	198	192	88	252
1930	0	0	117	316	396	1,100	373	354	365	354	5	3
1931	0	0	0	0	205	212	205	205	212	205	0	0
1932	383	560	881	0	597	2,212	475	356	368	356	105	305
1933	0	108	0	0	536	535	499	271	280	271	196	585
1934	189	44	139	0	216	223	216	216	223	216	0	0
1935	18	162	0	1,172	1,353	2,145	444	444	459	444	1	2
1936	113	2,176	1,100	1,100	2,681	2,038	479	248	256	248	193	568
1937	96	248	1,101	1,115	1,786	1,542	515	259	221	214	245	721
1938	278	987	2,130	1,628	4,822	4,043	679	472	488	472	102	295
1939	53	44	0	54	213	220	324	213	220	213	65	176
1940	137	1,201	1,513	1,213	3,211	1,142	499	253	253	245	213	634
1941	366	630	1,100	1,100	1,849	2,361	537	268	219	212	265	784
1942	696	1,016	1,100	1,065	2,425	3,594	645	311	277	268	378	945
1943	807	997	2,150	2,142	2,887	1,516	508	272	281	272	204	593
1944	0	0	212	230	566	955	413	228	236	228	144	421
1945	331	832	737	1,019	1,473	2,110	608	296	229	222	326	973
1946	774	825	1,037	1,082	1,352	1,100	470	241	161	156	235	682
1947	321	213	56	414	298	175	307	176	175	170	82	225
1948	0	0	0	543	1,100	2,295	459	411	424	411	47	139
1949	125	27	157	694	1,063	1,043	413	301	311	301	85	243
1950	0	751	801	1,249	1,592	2,137	489	272	282	272	2,348	4,115
1951	1,289	1,143	1,164	1,739	2,090	613	587	288	253	245	294	880
1952	885	1,312	1,395	1,863	4,398	4,059	1,153	480	496	480	175	521
1953	394	566	437	1,022	895	1,766	572	294	304	294	271	716
1954	0	128	629	935	1,094	355	474	249	257	249	187	550
1955	113	160	63	47	445	537	435	227	225	218	169	2,184
1956	2,741	1,344	1,237	1,337	2,786	2,950	575	286	295	286	261	759
1957	30	102	543	446	1,144	1,815	489	296	306	296	166	487
1958	83	1,128	1,342	2,263	2,931	3,259	639	367	296	287	282	646
1959	0	342	343	97	238	246	334	238	246	238	55	151
1960	0	0	0	197	610	566	386	386	399	386	0	0
1961	56	0	0	0	327	338	327	327	338	327	0	0
1962	0	0	688	914	800	1,281	497	361	373	361	127	370
1963	122	1,002	543	1,442	3,155	1,990	544	276	285	276	241	697
1964	241	373	0	115	231	580	416	231	239	231	143	2,757
1965	2,328	1,173	1,100	1,410	1,857	2,361	813	378	325	589	652	905
1966	446	369	306	5	175	167	558	276	167	162	309	922
1967	469	800	1,163	1,657	2,300	3,854	1,726	298	299	310	352	786
1968	112	192	441	326	190	227	450	233	196	190	200	588
1969	1,997	1,650	1,289	2,274	4,251	3,346	799	449	425	468	343	1,013
1970	1,963	1,143	1,337	1,048	1,925	1,661	567	298	308	298	248	929
1971	778	844	884	968	712	1,757	659	467	337	396	263	779
1972	408	380	219	81	297	842	506	256	171	165	264	773
1973	586	1,186	1,078	1,001	1,842	1,362	578	284	238	231	412	988
1974	1,206	862	1,569	1,658	1,934	2,008	646	553	389	262	207	597
1975	65	11	907	1,100	1,256	2,634	744	533	529	427	353	727
1976	50	0	0	0	160	165	160	160	165	160	0	0
1977	0	0	0	0	0	0	0	0	0	0	0	0
1978	7	108	135	177	250	314	288	253	187	104	156	146
1979	82	15	101	174	537	555	537	537	555	537	10	0
1980	2,005	2,394	1,577	1,183	1,825	2,512	915	260	247	239	234	678
1981	3	253	357	410	209	216	449	233	216	209	191	868
1982	1,537	2,689	2,369	3,894	4,328	2,699	913	537	448	434	1,073	1,708
1983	1,739	2,427	3,840	2,117	3,088	5,899	3,031	775	611	592	1,688	2,586
1984	1,517	1,232	1,288	1,075	1,996	1,486	659	381	274	282	482	825
1985	348	203	52	623	317	165	447	232	144	139	223	649
1986	289	4,415	2,930	1,818	2,812	1,879	513	316	327	316	176	507
1987	0	0	0	0	229	237	229	229	237	229	0	0
1988	32	15	0	0	251	259	251	251	259	251	0	0
1989	49	0	0	258	1,007	894	493	493	509	493	5	0
1990	85	142	34	116	378	826	378	378	390	378	0	0

Minimum	0	0	0	0	0	0	0	0	0	0	0	0
Maximum	2,741	4,415	3,840	3,894	4,822	5,899	3,031	775	611	592	2,348	4,115
Average	445	633	718	821	1,400	1,506	544	312	293	286	238	625

## Camanche Reservoir Storage in Acre-Feet

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1921	335,447	335,108	377,902	423,804	397,010	430,879	395,079	353,196	317,744	295,786	285,669	307,056
1922	317,008	335,236	388,543	398,471	334,188	430,879	397,759	352,861	313,644	288,720	286,680	320,552
1923	317,778	321,784	334,624	353,003	390,342	397,663	367,652	330,796	305,530	292,788	280,966	294,407
1924	283,512	272,373	259,890	241,824	216,986	208,432	200,321	194,530	193,989	196,644	180,865	169,057
1925	159,036	152,872	164,610	209,435	318,042	359,866	344,594	335,803	337,400	341,379	319,274	300,736
1926	290,556	281,837	269,153	269,573	259,305	249,324	248,400	238,073	236,309	239,354	236,747	253,222
1927	255,821	301,269	327,194	351,129	388,991	430,879	391,994	345,987	311,490	295,694	279,085	294,459
1928	294,303	290,986	273,355	320,272	421,191	381,372	365,557	350,819	346,353	341,266	317,916	310,491
1929	303,361	293,033	281,279	263,628	237,666	235,993	232,970	224,620	222,300	223,007	211,660	213,848
1930	203,741	193,716	190,286	191,698	176,991	217,612	212,056	208,581	213,547	222,666	207,205	193,006
1931	181,643	170,882	158,480	140,920	136,771	128,981	121,544	116,409	116,301	121,578	112,175	107,124
1932	124,750	155,512	200,963	189,657	187,661	294,178	294,200	290,121	294,663	303,366	293,126	298,358
1933	268,352	283,171	270,924	252,765	246,643	253,289	255,119	246,127	245,761	250,232	245,206	272,069
1934	272,667	268,521	263,985	245,616	221,754	213,717	203,749	197,178	196,763	199,452	184,438	171,103
1935	161,855	159,800	148,595	204,720	244,912	314,993	306,350	304,136	311,952	322,276	300,167	281,920
1936	281,426	301,269	333,187	356,235	408,948	430,879	392,909	347,422	313,370	296,287	284,686	302,147
1937	298,653	301,269	327,194	374,040	414,510	423,463	392,938	353,324	322,138	307,828	301,117	263,759
1938	267,311	258,403	284,328	231,453	335,152	430,879	394,916	353,162	323,633	313,747	294,902	291,348
1939	282,815	274,682	263,161	248,268	224,452	216,068	212,665	205,784	203,239	207,619	195,135	191,991
1940	193,675	257,757	297,290	351,129	430,893	420,470	393,884	358,755	334,163	319,896	310,216	328,570
1941	316,096	301,269	327,370	375,442	399,000	430,879	392,302	343,881	303,579	286,244	280,062	295,652
1942	257,378	254,364	309,426	355,520	349,140	430,879	394,567	344,541	303,758	283,890	270,341	297,642
1943	255,389	252,190	273,355	351,129	413,952	418,273	384,402	342,774	312,607	298,430	287,196	303,932
1944	292,278	285,529	287,586	284,207	279,533	310,909	306,966	294,940	291,723	293,324	288,589	301,421
1945	308,885	290,297	325,565	368,279	385,756	425,241	396,352	354,951	320,320	304,911	290,274	281,665
1946	287,026	318,772	370,914	416,838	430,893	419,334	392,409	358,025	329,517	311,070	304,148	327,426
1947	330,717	329,106	320,878	327,376	305,743	290,851	280,614	265,594	258,847	257,715	246,707	246,637
1948	234,055	223,356	212,358	229,028	254,092	332,247	323,632	318,516	323,501	327,571	307,769	298,620
1949	294,080	285,196	287,249	310,159	332,567	336,702	325,997	314,947	313,940	314,885	297,983	294,098
1950	282,722	301,269	327,194	374,040	394,485	430,338	389,587	342,492	307,571	293,585	231,453	231,453
1951	231,453	231,453	273,355	351,129	423,091	388,450	374,810	349,326	331,921	320,846	317,724	328,570
1952	301,269	301,269	319,236	240,437	306,213	422,935	401,384	345,491	303,052	291,236	276,505	288,231
1953	301,269	257,121	271,267	315,156	311,804	344,718	328,510	301,768	285,706	278,056	272,385	297,797
1954	285,949	282,358	310,216	348,365	372,204	335,575	328,623	314,316	310,139	307,922	297,468	315,254
1955	316,209	314,712	305,465	291,709	279,387	285,960	283,586	271,670	267,787	268,238	262,412	244,416
1956	231,453	247,430	300,244	352,094	378,019	430,879	389,312	336,854	296,538	276,542	267,784	294,087
1957	284,596	279,976	304,431	313,580	331,403	371,303	354,587	332,534	321,092	314,277	301,791	313,884
1958	304,277	301,269	327,194	354,084	363,067	430,879	387,588	334,514	288,805	268,156	260,727	279,273
1959	268,623	280,815	286,109	277,026	251,901	241,408	233,254	222,447	221,153	222,927	209,607	204,838
1960	193,408	184,106	173,428	168,006	166,386	175,507	171,200	170,084	177,330	188,507	173,438	159,370
1961	150,857	139,945	127,874	110,697	114,290	114,104	112,069	113,323	120,246	132,822	123,096	114,004
1962	106,862	107,564	142,799	185,962	195,831	247,125	248,912	245,517	250,647	262,119	253,353	263,144
1963	258,357	233,443	256,309	328,528	406,958	430,879	393,294	345,932	310,191	294,707	268,049	291,646
1964	296,717	305,828	293,199	282,008	257,098	266,783	263,418	251,928	249,155	251,701	244,469	240,437
1965	244,958	257,559	311,626	363,248	385,615	422,089	388,125	334,805	289,184	291,985	293,130	328,390
1966	334,606	345,560	351,206	333,407	304,250	288,799	294,042	285,117	277,806	274,688	278,556	324,889
1967	301,088	312,499	326,109	354,867	288,669	405,030	416,963	347,895	291,043	269,074	267,118	294,924
1968	292,461	293,923	311,302	312,490	284,415	272,645	271,359	260,159	254,742	254,046	251,432	275,946
1969	294,035	301,088	326,109	314,413	352,094	430,879	392,190	339,127	296,408	283,604	279,349	318,562
1970	231,212	231,212	280,107	324,158	348,290	375,964	360,709	335,466	321,016	314,416	290,994	301,088
1971	302,352	310,053	328,136	367,649	347,141	373,538	356,786	334,780	315,165	312,483	303,822	328,390
1972	337,107	347,996	348,058	335,349	311,555	333,418	331,851	319,327	311,559	303,954	300,605	328,390
1973	301,088	301,088	329,084	369,969	416,024	416,172	391,774	355,949	328,052	314,477	256,715	263,467
1974	252,977	282,928	319,296	371,387	399,904	423,087	387,442	351,746	316,878	299,702	289,663	307,299
1975	298,758	292,294	326,109	374,457	362,154	416,367	379,768	337,485	304,975	298,074	294,215	319,596
1976	309,583	298,505	285,754	268,034	240,156	228,490	217,186	208,704	205,165	203,959	187,894	173,560
1977	161,139	149,916	137,388	119,635	103,254	83,203	64,005	47,449	35,870	29,356	19,859	10,763
1978	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000
1979	4,000	4,000	4,000	4,000	19,572	30,094	37,443	47,728	65,625	89,693	81,177	73,219
1980	195,779	248,696	308,806	355,651	372,653	420,066	395,043	335,785	287,137	268,914	260,324	283,424
1981	274,930	277,965	291,380	298,097	271,229	258,858	257,561	246,207	242,075	243,068	240,988	231,152
1982	245,863	231,152	270,642	292,045	374,401	418,581	377,803	321,019	272,762	253,677	236,759	243,150
1983	270,401	281,072	317,487	331,475	247,310	369,638	429,300	357,254	288,431	267,025	231,152	231,152
1984	231,152	240,075	290,357	336,490	390,079	395,753	374,291	342,309	314,315	303,259	297,350	328,390
1985	337,147	337,544	331,128	349,728	329,015	313,342	311,469	299,664	291,208	287,217	287,502	315,277
1986	310,919	236,156	272,873	351,129	407,259	426,227	385,431	339,549	307,528	291,423	276,734	285,829
1987	273,655	264,076	254,180	235,889	212,395	205,162	196,104	190,427	190,668	194,264	178,414	165,870
1988	157,157	146,594	133,794	116,984	115,798	110,997	106,644	104,541	107,383	115,366	106,586	98,881
1989	94,780	88,840	83,920	89,195	112,512	141,553	144,178	149,937	164,765	183,521	168,682</td	

## Camanche Reservoir Elevation in Feet

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1921	222	225	228	235	231	235	231	225	220	216	214	218
1922	219	222	230	231	222	235	231	225	219	215	215	220
1923	220	220	222	225	230	231	227	222	218	216	214	216
1924	214	212	210	207	203	201	199	198	198	199	195	193
1925	191	189	192	201	220	226	224	222	223	223	220	217
1926	215	214	212	212	210	208	208	206	206	207	206	209
1927	209	217	221	225	230	235	230	224	219	216	213	216
1928	216	215	212	220	234	229	227	224	224	223	220	218
1929	217	216	214	211	206	206	205	204	204	204	202	202
1930	200	198	197	198	194	203	202	201	202	204	201	198
1931	195	193	190	186	185	184	182	180	180	182	179	178
1932	182	190	199	197	197	216	216	215	216	217	216	217
1933	215	214	212	209	208	209	209	208	208	208	208	212
1934	212	212	211	208	203	202	200	199	199	199	196	193
1935	191	191	188	200	208	219	218	217	219	220	217	214
1936	214	217	222	225	233	235	230	224	219	216	214	217
1937	217	217	221	228	233	235	230	225	220	218	217	211
1938	211	210	214	205	222	235	231	225	220	219	216	215
1939	214	213	211	208	204	202	202	200	200	201	198	198
1940	198	210	216	225	235	234	231	226	222	220	218	221
1941	219	217	221	228	231	235	230	223	217	215	214	216
1942	210	209	218	225	224	235	231	224	217	214	212	216
1943	209	209	212	225	233	234	229	223	219	217	215	217
1944	216	214	215	214	213	218	218	216	215	216	215	217
1945	218	215	221	227	229	235	231	225	220	218	215	214
1946	215	220	227	234	235	234	230	226	221	219	217	221
1947	222	221	220	221	218	215	214	211	210	210	208	208
1948	206	204	202	205	209	222	220	220	220	221	218	217
1949	216	214	215	218	222	222	221	219	219	219	216	216
1950	214	217	221	228	231	235	230	223	218	216	205	205
1951	205	205	212	225	234	230	228	224	222	220	220	221
1952	217	217	220	207	218	234	232	224	217	215	213	215
1953	217	210	212	219	219	224	221	217	214	213	212	216
1954	215	214	218	224	228	222	221	219	218	218	216	219
1955	219	219	218	215	213	215	214	212	212	212	211	207
1956	205	208	217	225	228	235	230	222	216	213	212	216
1957	214	214	217	219	222	227	225	222	220	219	217	219
1958	217	217	221	225	226	235	230	222	215	212	210	213
1959	212	214	215	213	209	207	205	204	203	204	201	200
1960	198	196	194	193	192	194	193	193	195	197	194	191
1961	189	186	183	179	180	180	179	179	181	185	182	180
1962	178	178	187	196	198	208	208	208	209	211	209	211
1963	210	206	210	221	232	235	230	224	218	216	212	215
1964	216	218	216	214	210	211	211	209	208	209	207	207
1965	208	210	219	226	229	234	230	222	215	215	216	221
1966	222	224	225	222	217	215	216	214	213	213	213	221
1967	217	219	221	225	215	232	234	224	215	212	211	216
1968	216	216	219	219	214	212	212	210	209	209	209	213
1969	216	217	221	219	225	235	230	223	216	214	213	220
1970	205	205	214	221	224	228	226	222	220	219	215	217
1971	217	218	221	227	224	228	225	222	219	219	217	221
1972	222	224	224	222	219	222	222	220	219	217	217	221
1973	217	217	221	227	234	234	230	225	221	219	210	211
1974	209	214	220	227	231	234	230	225	219	217	215	218
1975	217	216	221	228	226	234	229	223	218	216	216	220
1976	218	217	214	212	207	205	203	201	200	200	197	194
1977	191	189	186	181	177	170	163	155	148	144	136	127
1978	119	119	119	119	119	119	119	119	119	119	119	119
1979	119	119	119	119	136	144	149	155	164	172	169	167
1980	198	208	218	225	228	234	231	222	215	212	210	214
1981	213	213	215	216	212	210	210	208	207	207	207	205
1982	208	205	212	215	228	234	228	220	212	209	206	207
1983	212	214	219	222	208	227	235	225	215	211	205	205
1984	205	207	215	222	230	231	228	223	219	217	216	221
1985	222	223	222	224	221	219	219	217	215	215	215	219
1986	218	206	212	225	232	235	229	223	218	215	213	214
1987	212	211	209	206	202	200	198	197	197	198	195	192
1988	190	188	185	180	180	179	178	177	178	180	177	175
1989	174	172	170	172	179	187	187	189	192	196	193	190
1990	188	188	185	183	179	187	187	188	190	193	189	186

Minimum	119	119	119	119	119	119	119	119	119	119	119	119
Maximum	222	225	230	235	235	235	235	226	224	223	220	221
Average	207	207	209	212	214	217	215	212	209	208	206	207

## Total Camanche Releases in CFS

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1921	738	820	761	278	1,528	2,010	929	828	691	471	356	300
1922	209	491	246	289	2,991	2,632	1,042	939	800	569	364	478
1923	558	507	200	278	1,016	1,269	867	765	628	417	356	300
1924	201	200	199	280	572	312	281	247	182	150	256	220
1925	200	200	201	278	755	1,009	606	504	367	341	356	300
1926	201	200	200	278	603	371	402	352	237	178	256	220
1927	200	205	267	640	1,390	1,969	1,016	914	777	482	471	300
1928	201	200	1,291	278	699	953	550	448	312	330	462	300
1929	201	200	199	280	572	312	318	266	190	150	256	220
1930	200	200	201	278	603	371	402	352	237	178	256	220
1931	200	200	199	280	246	309	281	247	182	100	156	145
1932	116	108	135	173	603	371	402	352	237	178	256	220
1933	200	200	200	278	603	371	402	352	237	178	256	220
1934	200	200	199	280	572	312	318	266	190	150	256	220
1935	200	200	201	278	658	912	509	408	271	247	356	300
1936	207	2,180	584	696	1,775	1,613	1,010	908	770	498	362	307
1937	201	382	853	315	1,074	1,328	925	823	686	415	356	1,345
1938	248	1,371	1,836	2,504	3,092	2,369	1,177	1,071	926	610	397	348
1939	201	200	199	280	572	312	318	266	190	150	256	220
1940	200	200	935	290	1,862	1,248	845	744	607	448	356	383
1941	625	961	732	344	1,413	1,757	1,078	976	839	461	356	572
1942	1,445	1,118	223	303	2,493	2,155	1,149	1,045	904	555	624	512
1943	1,607	1,091	1,934	830	1,811	1,376	974	870	730	472	373	320
1944	201	200	200	278	603	371	402	352	237	178	256	220
1945	200	1,289	200	278	1,140	1,394	991	889	752	457	582	1,159
1946	689	271	200	278	1,084	1,224	822	720	583	426	356	300
1947	263	245	200	278	603	371	402	352	237	178	256	220
1948	200	200	200	278	671	924	522	420	283	312	356	300
1949	201	200	200	278	658	912	509	408	271	247	356	300
1950	244	488	390	443	1,210	1,467	1,065	959	815	490	3,445	4,216
1951	1,390	1,176	493	409	874	1,128	725	623	487	400	356	775
1952	1,480	1,368	1,196	3,175	3,286	2,035	1,417	1,309	1,161	635	410	364
1953	220	1,343	200	278	906	1,160	758	656	519	392	356	300
1954	201	200	200	278	658	912	509	408	271	247	356	300
1955	201	200	200	278	603	371	402	352	237	178	256	2,650
1956	3,126	1,074	363	452	2,336	1,995	1,165	1,060	918	587	383	331
1957	201	200	200	278	829	1,083	680	578	441	378	356	300
1958	283	1,311	1,092	1,996	2,745	2,054	1,257	1,152	1,009	587	385	334
1959	201	200	200	278	603	371	402	352	237	178	256	220
1960	200	200	200	278	603	371	402	352	237	178	256	220
1961	200	200	199	280	246	309	318	266	190	100	156	145
1962	116	108	135	173	603	371	402	352	237	178	256	220
1963	200	1,523	200	278	1,836	1,520	1,068	967	830	511	710	300
1964	201	200	200	278	603	371	402	352	237	178	256	3,052
1965	2,356	947	220	542	1,439	1,682	1,279	1,176	1,036	511	646	364
1966	372	200	200	278	603	371	402	352	237	178	256	220
1967	1,023	606	991	1,287	3,334	1,848	1,446	1,341	1,198	639	387	337
1968	201	200	200	278	603	371	402	352	237	178	256	220
1969	1,888	1,725	908	2,477	3,587	1,958	1,341	1,234	1,086	655	410	397
1970	3,515	1,156	599	292	883	1,137	735	632	493	375	688	851
1971	769	702	618	278	1,000	1,254	851	749	612	404	404	440
1972	263	200	200	278	636	418	455	386	257	255	337	328
1973	1,172	1,340	699	287	1,038	1,292	889	787	649	447	1,405	957
1974	1,442	332	1,009	792	1,416	1,559	1,157	1,054	916	518	363	308
1975	201	200	428	278	1,405	1,659	1,256	1,154	1,017	526	400	300
1976	201	200	199	280	572	312	281	247	182	150	256	220
1977	200	200	200	280	246	309	281	247	182	100	156	145
1978	116	108	134	175	246	309	281	247	182	100	156	145
1979	116	108	135	173	278	368	402	352	237	138	156	145
1980	116	1,570	624	380	1,502	1,649	1,247	1,145	1,008	501	356	300
1981	201	200	200	278	603	371	402	352	237	178	256	1,058
1982	1,427	3,048	1,868	3,642	2,944	1,893	1,492	1,383	1,233	744	1,433	1,738
1983	1,503	2,966	3,515	1,898	4,419	3,787	1,976	1,867	1,717	913	2,382	2,824
1984	1,542	1,128	475	278	1,074	1,327	925	823	686	445	635	331
1985	201	200	200	278	603	371	402	352	237	178	256	220
1986	401	5,952	2,461	522	1,850	1,492	1,090	984	838	542	401	353
1987	204	200	199	280	572	312	318	266	190	150	256	220
1988	200	200	200	280	246	309	281	247	182	100	156	145
1989	116	108	135	173	603	371	402	352	237	178	256	220
1990	200	200	199	280	572	312	318	266	190	150	256	220
Minimum	116	108	134	173	246	309	281	247	182	100	156	145
Maximum	3,515	5,952	3,515	3,642	4,419	3,787	1,976	1,867	1,717	913	3,445	4,216
Average	553	675	507	530	1,178	1,049	725	645	524	343	443	531

92 190 10-9948-WSIP  
 Composite Program I - GFS Eqn for Maint. of Camanche Hypoli  
 Fish Releases per Production Goal Faxed 1-2-92 w/Ramping  
 Drought Planning Sequence - 1976-1977-185 TAF

Flow at Victor (Bruella Rd) CFS

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1921	717	801	733	231	1,402	1,845	757	706	615	429	337	274
1922	185	470	215	239	2,862	2,463	865	814	721	524	342	450
1923	537	488	172	231	890	1,104	694	644	552	374	337	274
1924	180	181	171	233	502	224	221	196	147	126	237	195
1925	178	181	173	231	630	843	433	383	291	299	337	274
1926	180	181	172	231	533	283	317	286	195	154	237	195
1927	178	187	239	594	1,264	1,804	843	793	701	439	452	274
1928	180	181	1,263	231	574	787	378	327	235	287	442	274
1929	180	181	171	233	502	224	233	200	147	126	237	195
1930	178	181	173	231	533	283	317	286	195	154	237	195
1931	178	181	171	233	177	220	221	196	147	77	137	120
1932	95	89	107	126	533	283	317	286	195	154	237	195
1933	178	181	172	231	533	283	317	286	195	154	237	195
1934	178	181	171	233	502	224	233	200	147	126	237	195
1935	178	181	173	231	533	747	337	286	195	204	337	274
1936	183	2,159	554	647	1,647	1,445	835	784	691	454	341	279
1937	180	363	825	269	949	1,162	752	702	610	372	337	1,319
1938	213	1,339	1,792	2,441	2,949	2,185	985	932	834	536	366	308
1939	180	181	171	233	502	224	233	200	147	126	237	195
1940	178	181	907	244	1,737	1,083	673	622	531	405	337	358
1941	604	942	704	297	1,288	1,592	905	854	763	419	337	547
1942	1,418	1,094	188	249	2,359	1,981	967	916	821	507	599	480
1943	1,580	1,067	1,899	776	1,678	1,203	793	741	647	425	349	288
1944	180	181	172	231	533	283	317	286	195	154	237	195
1945	178	1,270	172	231	1,015	1,228	818	768	676	414	563	1,134
1946	668	252	172	231	959	1,059	649	599	507	383	337	274
1947	242	226	172	231	533	283	317	286	195	154	237	195
1948	178	181	172	231	546	759	349	299	207	269	337	274
1949	180	181	172	231	533	747	337	286	195	204	337	274
1950	209	458	347	381	1,068	1,284	875	822	725	437	3,415	4,178
1951	1,369	1,158	465	363	749	962	553	502	410	358	337	750
1952	1,439	1,332	1,147	3,106	3,137	1,844	1,219	1,164	1,065	577	375	319
1953	199	1,325	172	231	781	995	585	534	443	350	337	274
1954	180	181	172	231	533	747	337	286	195	204	337	274
1955	180	181	172	231	533	283	317	286	195	154	237	2,625
1956	3,095	1,047	324	394	2,199	1,817	980	927	832	537	356	297
1957	180	181	172	231	704	917	507	457	365	335	337	274
1958	251	1,283	1,053	1,937	2,607	1,875	1,070	1,018	922	536	357	298
1959	180	181	172	231	533	283	317	286	195	154	237	195
1960	178	181	172	231	533	283	317	286	195	154	237	195
1961	178	181	171	233	177	220	233	200	147	77	137	120
1962	95	89	107	126	533	283	317	286	195	154	237	195
1963	178	1,504	172	231	1,711	1,355	896	845	754	468	691	274
1964	180	181	172	231	533	283	317	286	195	154	237	3,027
1965	2,329	924	186	489	1,307	1,509	1,099	1,048	954	463	622	333
1966	351	181	172	231	533	283	317	286	195	154	237	195
1967	991	578	951	1,228	3,195	1,668	1,259	1,206	1,110	588	359	300
1968	180	181	172	231	533	283	317	286	195	154	237	195
1969	1,848	1,690	859	2,408	3,439	1,767	1,144	1,089	990	597	374	353
1970	3,490	1,134	567	241	753	967	557	506	413	329	666	822
1971	748	683	590	231	875	1,088	678	628	536	361	385	414
1972	242	181	172	231	533	283	317	286	195	220	318	303
1973	1,148	1,319	668	238	909	1,123	714	663	570	402	1,384	930
1974	1,419	311	978	743	1,288	1,390	981	930	837	473	342	280
1975	180	181	400	231	1,280	1,493	1,083	1,033	941	483	380	274
1976	180	181	171	233	502	224	221	196	147	126	237	195
1977	178	181	172	233	177	220	221	196	147	77	137	120
1978	95	89	106	128	177	220	221	196	147	77	137	120
1979	95	89	107	126	208	280	317	286	195	114	137	120
1980	95	1,552	596	333	1,377	1,484	1,074	1,024	932	458	337	274
1981	180	181	172	231	533	283	317	286	195	154	237	1,033
1982	1,381	3,008	1,813	3,567	2,788	1,696	1,287	1,232	1,130	682	1,393	1,688
1983	1,458	2,326	3,460	1,823	4,263	3,590	1,771	1,716	1,614	851	2,342	2,775
1984	1,521	1,110	447	231	948	1,162	752	702	610	402	616	306
1985	180	181	172	231	533	283	317	286	195	154	237	195
1986	364	5,919	2,415	457	1,705	1,306	897	843	745	487	369	312
1987	183	181	171	233	502	224	233	200	147	126	237	195
1988	178	181	172	233	177	220	221	196	147	77	137	120
1989	95	89	107	126	533	283	317	286	195	154	237	195
1990	178	181	171	233	502	224	233	200	147	126	237	195
Minimum	95	89	106	126	177	220	221	196	147	77	137	120
Maximum	3,490	5,919	3,460	3,567	4,263	3,590	1,771	1,716	1,614	851	3,415	4,178
Average	529	653	476	480	1,073	912	587	545	459	306	422	503

92 190 10-9948-WSIP

Composite Program I - GFS Eqn for Maint. of Camanche Hypoli

Fish Releases per Production Goal Faxed 1-2-92 w/Ramping

Drought Planning Sequence - 1976-1977-185 TAF

## Flow Below Lodi Lake in CFS

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1921	671	761	675	124	1,217	1,595	468	441	439	333	299	228
1922	133	424	150	124	2,669	2,204	568	541	538	423	299	397
1923	491	448	114	124	705	854	405	378	376	279	299	228
1924	134	141	114	124	348	33	18	19	19	68	199	149
1925	133	141	115	124	444	593	145	117	115	203	299	228
1926	134	141	114	124	348	33	29	21	19	59	199	149
1927	133	147	181	486	1,079	1,554	555	527	525	344	414	228
1928	134	141	1,205	124	389	538	89	62	59	192	405	228
1929	134	141	114	124	348	33	29	21	19	68	199	149
1930	133	141	115	124	348	33	29	21	19	59	199	149
1931	133	141	114	124	23	30	18	19	19	19	99	74
1932	49	49	49	19	348	33	29	21	19	59	199	149
1933	133	141	114	124	348	33	29	21	19	59	199	149
1934	133	141	114	124	348	33	29	21	19	68	199	149
1935	133	141	115	124	348	497	48	21	19	109	299	228
1936	133	2,115	491	534	1,456	1,189	540	513	510	355	299	228
1937	134	323	767	161	763	912	464	437	434	277	299	1,273
1938	133	1,269	1,697	2,293	2,721	1,891	651	624	622	434	299	228
1939	134	141	114	124	348	33	29	21	19	68	199	149
1940	133	141	849	136	1,551	833	384	357	355	310	299	312
1941	558	902	646	190	1,103	1,342	616	589	587	323	299	501
1942	1,357	1,040	114	124	2,155	1,712	659	632	629	401	549	419
1943	1,520	1,014	1,826	652	1,475	934	486	459	456	318	299	228
1944	134	141	114	124	348	33	29	21	19	59	199	149
1945	133	1,230	114	124	829	978	530	503	500	319	525	1,088
1946	622	212	114	124	773	809	361	333	331	288	299	228
1947	196	186	114	124	348	33	29	21	19	59	199	149
1948	133	141	114	124	360	509	61	33	31	174	299	228
1949	134	141	114	124	348	497	48	21	19	109	299	228
1950	133	390	256	237	845	994	546	518	516	318	3,352	4,101
1951	1,323	1,118	407	255	563	713	264	237	234	262	299	704
1952	1,349	1,252	1,040	2,946	2,896	1,536	871	844	841	447	299	228
1953	153	1,284	114	124	596	745	296	269	267	254	299	228
1954	134	141	114	124	348	497	48	21	19	109	299	228
1955	134	141	114	124	348	33	29	21	19	59	199	2,579
1956	3,027	987	243	261	1,987	1,539	662	635	632	424	299	228
1957	134	141	114	124	518	667	219	192	189	240	299	228
1958	182	1,222	969	1,801	2,392	1,594	750	723	720	422	299	228
1959	134	141	114	124	348	33	29	21	19	59	199	149
1960	133	141	114	124	348	33	29	21	19	59	199	149
1961	133	141	114	124	23	30	29	21	19	19	99	74
1962	49	49	49	19	348	33	29	21	19	59	199	149
1963	133	1,464	114	124	1,526	1,105	607	580	578	373	654	228
1964	134	141	114	124	348	33	29	21	19	59	199	2,981
1965	2,270	872	114	366	1,105	1,242	793	766	764	358	573	274
1966	306	141	114	124	348	33	29	21	19	59	199	149
1967	919	515	865	1,090	2,977	1,385	936	909	906	472	299	228
1968	134	141	114	124	348	33	29	21	19	59	199	149
1969	1,758	1,610	753	2,248	3,198	1,460	796	769	767	468	299	262
1970	3,436	1,087	501	124	557	707	258	231	228	228	621	768
1971	702	643	532	124	689	838	390	363	360	266	347	368
1972	197	141	114	124	348	33	29	21	19	125	280	257
1973	1,097	1,274	604	124	717	866	417	390	388	302	1,342	878
1974	1,367	266	915	629	1,096	1,133	685	658	655	374	299	228
1975	134	141	343	124	1,094	1,243	795	768	765	388	343	228
1976	134	141	114	124	348	33	18	19	19	68	199	149
1977	133	141	115	124	23	30	18	19	19	19	99	74
1978	49	49	49	19	23	30	18	19	19	19	99	74
1979	49	49	49	19	23	30	29	21	19	19	99	74
1980	49	1,512	539	226	1,191	1,234	785	758	756	363	299	228
1981	134	141	114	124	348	33	29	21	19	59	199	987
1982	1,278	2,916	1,692	3,392	2,532	1,372	923	896	893	543	1,307	1,585
1983	1,354	2,235	3,340	1,648	4,007	3,266	1,407	1,380	1,377	712	2,256	2,671
1984	1,476	1,070	389	124	763	912	463	436	434	307	578	260
1985	134	141	114	124	348	33	29	21	19	59	199	149
1986	280	5,846	2,316	305	1,473	1,007	558	531	529	363	299	228
1987	138	141	114	124	348	33	29	21	19	68	199	149
1988	133	141	115	124	23	30	18	19	19	19	99	74
1989	49	49	49	19	348	33	29	21	19	59	199	149
1990	133	141	114	124	348	33	29	21	19	68	199	149
Minimum	49	49	49	19	23	30	18	19	19	19	99	74
Maximum	3,436	5,846	3,340	3,392	4,007	3,266	1,407	1,380	1,377	712	3,352	4,101
Average	477	608	411	365	885	664	305	287	285	212	378	451

## Flow into the Delta in CFS

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1921	664	754	666	110	1,194	1,564	439	420	424	323	291	219
1922	125	417	141	110	2,646	2,174	538	519	524	413	291	388
1923	483	440	105	110	682	823	376	357	361	268	291	219
1924	127	133	105	110	325	3	0	4	8	58	191	140
1925	125	133	106	110	421	563	115	96	101	193	291	219
1926	127	133	105	110	325	3	0	0	4	49	191	140
1927	125	139	172	472	1,056	1,523	525	506	511	334	406	219
1928	127	133	1,196	110	366	507	60	40	45	181	396	219
1929	127	133	105	110	325	3	0	0	4	58	191	140
1930	125	133	106	110	325	3	0	0	4	49	191	140
1931	125	133	105	110	0	0	0	4	8	9	91	65
1932	42	42	40	5	325	3	0	0	4	49	191	140
1933	125	133	105	110	325	3	0	0	4	49	191	140
1934	125	133	105	110	325	3	0	0	4	58	191	140
1935	125	133	106	110	325	466	19	0	4	99	291	219
1936	125	2,107	482	521	1,433	1,158	510	491	496	344	291	219
1937	127	315	758	148	740	882	434	415	420	267	291	1,264
1938	125	1,261	1,688	2,280	2,698	1,860	622	603	607	424	291	219
1939	127	133	105	110	325	3	0	0	4	58	191	140
1940	125	133	840	123	1,528	802	355	336	340	300	291	303
1941	551	894	637	176	1,080	1,311	587	568	572	313	291	491
1942	1,349	1,033	105	110	2,132	1,681	630	610	615	390	541	409
1943	1,513	1,006	1,817	639	1,452	904	456	437	442	308	291	219
1944	127	133	105	110	325	3	0	0	4	49	191	140
1945	125	1,222	105	110	806	948	500	481	486	308	517	1,079
1946	615	205	105	110	750	779	331	312	317	278	291	219
1947	188	179	105	110	325	3	0	0	4	49	191	140
1948	125	133	105	110	337	479	31	12	17	164	291	219
1949	127	133	105	110	325	466	19	0	4	99	291	219
1950	125	383	247	224	822	964	516	497	502	308	3,343	4,092
1951	1,315	1,110	398	242	540	682	235	215	220	252	291	694
1952	1,341	1,245	1,031	2,932	2,873	1,506	841	822	827	437	291	219
1953	145	1,277	105	110	573	714	267	248	252	244	291	219
1954	127	133	105	110	325	466	19	0	4	99	291	219
1955	127	133	105	110	325	3	0	0	4	49	191	2,570
1956	3,020	980	234	247	1,964	1,508	632	613	618	414	291	219
1957	127	133	105	110	495	637	189	170	175	230	291	219
1958	174	1,214	960	1,788	2,369	1,563	720	701	706	412	291	219
1959	127	133	105	110	325	3	0	0	4	49	191	140
1960	125	133	105	110	325	3	0	0	4	49	191	140
1961	125	133	105	110	0	0	0	0	4	9	91	65
1962	42	42	40	5	325	3	0	0	4	49	191	140
1963	125	1,457	105	110	1,503	1,074	578	558	563	363	645	219
1964	127	133	105	110	325	3	0	0	4	49	191	2,971
1965	2,262	864	105	353	1,082	1,211	764	745	749	348	565	265
1966	298	133	105	110	325	3	0	0	4	49	191	140
1967	912	507	856	1,076	2,954	1,354	907	887	892	462	291	219
1968	127	133	105	110	325	3	0	0	4	49	191	140
1969	1,750	1,602	744	2,235	3,175	1,429	767	747	752	457	291	253
1970	3,429	1,079	492	110	534	676	228	209	214	217	613	758
1971	695	636	523	110	666	808	360	341	346	256	339	359
1972	189	133	105	110	325	3	0	0	4	115	272	247
1973	1,089	1,266	595	110	694	835	388	369	373	292	1,333	869
1974	1,360	258	906	616	1,073	1,103	655	636	641	363	291	219
1975	127	133	334	110	1,071	1,213	765	746	751	377	335	219
1976	127	133	105	110	325	3	0	4	8	58	191	140
1977	125	133	106	110	0	0	0	4	8	9	91	65
1978	42	42	40	5	0	0	0	4	8	9	91	65
1979	42	42	40	5	0	0	0	0	4	9	91	65
1980	42	1,504	530	212	1,168	1,204	756	737	741	352	291	219
1981	127	133	105	110	325	3	0	0	4	49	191	977
1982	1,270	2,909	1,683	3,379	2,509	1,341	894	874	879	532	1,299	1,575
1983	1,347	2,227	3,331	1,635	3,984	3,235	1,377	1,358	1,363	701	2,248	2,661
1984	1,468	1,062	380	110	740	881	434	415	419	296	570	250
1985	127	133	105	110	325	3	0	0	4	49	191	140
1986	272	5,838	2,307	292	1,450	976	529	509	514	352	291	219
1987	130	133	105	110	325	3	0	0	4	58	191	140
1988	125	133	106	110	0	0	0	4	8	9	91	65
1989	42	42	40	5	325	3	0	0	4	49	191	140
1990	125	133	105	110	325	3	0	0	4	58	191	140
Minimum	42	42	40	5	0	0	0	0	4	9	91	65
Maximum	3,429	5,838	3,331	3,379	3,984	3,235	1,377	1,358	1,363	701	3,343	4,092
Average	470	600	402	351	862	633	277	266	270	202	370	442

## Pardee Reservoir Storage In Acre-Feet

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1921	170,912	141,710	130,097	108,899	197,854	209,995	196,307	188,583	181,452	178,332	182,867	182,684
1922	182,694	174,724	148,369	165,591	209,985	209,995	200,001	190,433	179,792	175,380	177,936	182,684
1923	192,683	188,179	188,857	209,995	209,985	209,995	202,505	187,923	174,398	166,098	174,802	182,684
1924	194,547	187,282	180,005	182,198	172,595	157,831	143,319	128,947	115,948	108,682	105,709	103,180
1925	112,054	173,198	209,985	209,995	209,985	209,995	190,286	167,852	148,022	131,555	141,443	153,108
1926	166,070	175,365	175,572	189,435	200,593	194,148	179,101	170,766	162,989	160,464	176,570	182,684
1927	196,609	209,960	209,985	209,995	209,985	209,995	200,602	184,857	169,180	157,689	169,721	182,684
1928	188,441	189,519	209,985	209,995	209,985	207,624	196,603	183,976	172,584	164,663	175,646	172,399
1929	166,495	162,428	164,374	175,307	179,256	177,301	172,008	170,472	169,710	172,625	179,869	182,684
1930	190,544	189,925	209,312	209,995	206,417	198,724	187,065	175,896	165,413	158,107	169,374	173,364
1931	167,187	160,998	161,910	160,930	156,164	145,052	138,788	126,339	112,952	100,544	98,258	104,129
1932	93,894	96,963	85,378	128,576	169,953	209,995	206,714	193,036	179,109	167,224	175,437	182,684
1933	183,659	166,810	170,863	198,163	209,985	209,995	196,418	188,501	180,045	175,928	180,722	182,684
1934	192,952	193,751	209,985	205,503	188,696	185,331	176,141	155,906	136,959	119,815	120,410	120,352
1935	125,694	139,736	159,775	209,995	209,985	209,995	193,147	173,252	154,431	140,772	152,045	164,355
1936	195,667	209,960	200,856	198,445	209,985	209,995	199,719	188,945	178,000	170,538	178,485	182,684
1937	182,770	209,960	209,985	207,608	209,985	209,995	194,847	185,027	174,318	167,714	173,048	182,684
1938	190,548	209,960	209,985	209,995	209,985	209,995	209,985	187,547	163,196	142,132	157,003	172,540
1939	188,316	182,720	188,639	196,739	189,598	191,587	185,689	183,707	182,333	186,239	187,881	182,684
1940	209,985	209,960	209,985	209,995	209,985	208,083	192,012	179,737	166,823	158,864	168,638	182,684
1941	194,366	209,960	206,671	202,139	209,985	209,995	200,676	192,047	182,747	177,247	182,040	182,684
1942	209,985	209,960	180,010	187,695	209,985	209,995	209,757	198,868	186,985	177,231	191,236	182,684
1943	209,985	207,582	209,985	209,995	209,985	209,995	199,363	188,811	176,406	169,354	178,058	182,684
1944	192,883	191,591	206,467	209,995	209,985	182,968	171,587	164,450	155,625	151,369	170,882	182,684
1945	184,163	209,960	209,985	196,454	209,985	209,995	189,644	178,577	166,684	159,595	166,400	182,684
1946	180,569	160,262	143,879	128,609	209,985	200,244	187,010	178,656	170,801	168,312	180,727	182,684
1947	179,744	180,857	191,245	196,451	192,888	191,691	185,637	180,346	175,725	179,885	180,792	175,320
1948	189,716	180,982	184,664	209,995	193,435	209,995	194,033	177,963	161,120	146,316	157,654	171,651
1949	178,149	170,340	183,664	196,242	209,985	200,645	191,379	184,489	177,848	174,014	182,503	182,684
1950	204,530	209,960	209,985	209,995	209,985	209,995	196,639	183,372	170,742	163,378	209,995	209,985
1951	209,985	209,960	209,985	209,995	209,985	209,995	191,301	180,224	168,827	158,204	164,538	182,684
1952	209,985	209,960	209,985	209,995	209,985	209,995	209,985	192,315	171,045	151,700	166,031	182,684
1953	209,985	199,276	209,985	209,995	209,985	209,995	207,291	193,416	181,544	176,106	186,139	182,684
1954	197,434	209,960	209,985	209,995	209,985	209,995	190,552	185,398	186,082	190,164	198,347	182,684
1955	189,416	185,629	200,044	209,012	209,985	209,995	194,217	187,853	181,034	177,487	182,439	209,985
1956	209,985	209,960	209,985	209,995	209,985	209,995	203,351	190,392	176,336	170,248	182,594	182,684
1957	195,198	209,960	209,985	207,321	209,985	209,995	191,080	173,179	157,662	151,759	169,649	182,684
1958	206,184	209,960	209,985	209,995	209,985	209,995	209,985	204,908	192,268	185,845	193,548	182,684
1959	198,817	209,960	209,985	209,995	200,253	194,309	184,150	178,937	173,646	171,792	177,581	182,684
1960	180,167	189,944	199,835	209,995	209,985	209,995	195,601	181,982	168,601	157,229	164,825	172,903
1961	173,723	166,630	164,596	164,809	152,918	149,284	145,241	140,285	136,177	132,367	130,917	128,156
1962	124,809	160,411	154,902	171,257	170,896	209,995	196,104	187,389	176,910	175,634	184,504	182,684
1963	200,697	209,960	205,639	209,995	209,985	209,995	195,890	184,523	172,338	164,158	178,157	182,684
1964	195,166	187,541	198,848	209,152	201,249	185,336	173,664	166,846	160,867	159,409	175,982	209,985
1965	209,985	209,960	195,528	209,995	209,985	209,995	194,540	191,674	201,346	209,985	209,995	182,684
1966	175,855	157,463	162,243	192,427	203,070	194,193	172,895	165,225	165,655	165,261	170,459	182,684
1967	209,985	197,978	209,985	209,995	209,985	209,995	209,985	200,713	191,019	184,659	193,124	182,684
1968	195,990	209,960	209,985	209,995	201,694	200,956	183,405	175,297	169,391	166,006	177,760	182,684
1969	209,985	209,960	209,985	209,995	209,985	209,995	209,985	204,772	197,810	194,936	196,096	182,684
1970	209,985	209,960	209,985	196,820	209,985	209,995	197,935	182,636	167,556	157,070	184,539	209,985
1971	207,929	199,731	207,694	204,771	205,290	209,995	206,493	209,985	206,198	207,293	203,683	182,684
1972	173,174	158,539	183,599	209,995	209,985	209,995	194,393	187,691	185,912	189,546	194,870	182,684
1973	209,985	209,960	207,696	206,872	209,985	209,995	198,426	186,492	176,181	172,534	196,247	209,985
1974	209,985	203,492	209,985	209,995	209,985	209,995	209,985	209,780	203,137	201,132	182,684	
1975	184,920	201,623	209,985	196,515	209,985	209,995	209,039	209,985	209,995	209,995	209,995	182,684
1976	186,536	176,610	170,838	167,288	158,203	147,409	135,429	124,705	114,462	100,497	90,239	75,800
1977	66,096	50,319	38,704	35,002	35,782	34,793	33,754	32,529	32,688	26,195	19,468	16,802
1978	16,800	27,532	32,330	41,795	31,907	27,200	21,983	27,995	28,043	19,541	16,800	
1979	26,208	42,238	97,487	149,076	192,944	209,995	195,112	167,000	138,999	125,872	144,768	172,361
1980	209,985	209,960	209,985	209,995	209,985	209,995	209,985	199,249	187,858	179,240	183,635	182,684
1981	207,319	209,960	209,995	202,399	194,635	180,993	168,514	159,014	156,950	178,062	209,985	
1982	209,985	209,960	209,985	209,995	209,985	209,995	209,985	205,832	191,487	184,101	209,995	209,985
1983	209,985	209,960	209,985	209,995	209,985	209,995	209,985	209,985	209,995	209,985	209,995	209,985
1984	209,985	209,960	209,985	208,295	209,985	209,995	205,469	206,234	193,747	187,541	200,439	182,684
1985	165,079	168,359	202,077	209,995	200,716	196,133	178,269	173,968	173,256	177,760	188,412	182,684
1986	199,361	209,960	209,985	209,995	209,985	209,995	201,491	188,776	176,677	166,803	178,944	182,684
1987	187,278	184,845	192,905	194,124	178,877	167,687	165,981	163,882	159,481	143,985	135,439	132,558
1988	137,086	130,258	128,678	132,647	128,105	127,529	127,242	122,630	115,478	100,718	95,136	90,077
1989	82,793	76,567	122,353	174,985	209,985	209,995	197,294	181,921	169,665	148,470	165,350	179,2

92 229 10-9994-WS1P  
 Composite Program II - GFS Eqn for Maint. of Camanche Hypol  
 Fish Releases per Production Goal Faxed 1-2-92 w/Ramping  
 Drought Planning Sequence - 1976-1977-185 TAF

Pardee Reservoir Elevation In Feet

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1921	549.1	533.1	526.1	512.2	562.2	567.7	561.5	557.8	554.4	552.8	555.1	555.0
1922	555.0	551.0	536.9	546.3	567.7	567.7	563.2	558.7	553.6	551.4	552.6	555.0
1923	559.8	557.6	558.0	567.7	567.7	567.7	564.3	557.5	550.9	546.6	551.1	555.0
1924	560.7	557.2	553.7	554.7	549.9	542.2	534.0	525.4	517.0	512.1	510.0	509.6
1925	514.4	550.3	567.7	567.7	567.7	567.7	558.6	547.5	536.7	527.0	533.0	539.6
1926	546.6	551.4	551.5	558.2	563.4	560.5	553.2	549.0	545.0	543.6	552.0	555.0
1927	561.6	567.7	567.7	567.7	567.7	567.7	563.4	556.0	548.2	542.1	548.5	555.0
1928	557.8	558.3	567.7	567.7	567.7	566.6	561.6	555.6	549.9	545.8	551.5	549.8
1929	546.8	544.7	545.7	551.3	553.3	552.3	549.7	548.9	548.5	550.0	553.6	555.0
1930	558.8	558.5	567.4	567.7	566.1	562.6	557.1	551.6	546.2	542.3	548.3	550.3
1931	547.2	543.9	544.4	543.9	541.3	535.0	531.4	523.8	515.0	506.3	504.6	508.9
1932	501.3	503.6	494.5	525.2	548.6	567.7	566.2	559.9	553.2	547.2	551.4	555.0
1933	555.5	547.0	549.1	562.3	567.7	567.7	561.5	557.8	553.7	551.6	554.0	555.0
1934	559.9	560.3	567.7	565.7	557.9	556.3	551.7	541.1	530.3	519.6	520.0	519.9
1935	523.4	531.9	543.2	567.7	567.7	567.7	560.0	550.3	540.3	532.6	539.0	545.7
1936	561.2	567.7	563.6	562.5	567.7	567.7	563.0	558.0	552.7	548.9	552.9	555.0
1937	555.0	567.7	567.7	566.6	567.7	567.7	560.8	556.1	550.8	547.4	550.2	555.0
1938	558.8	567.7	567.7	567.7	567.7	567.7	567.7	557.3	545.1	533.4	541.7	549.9
1939	557.7	555.0	557.9	561.7	558.3	559.3	556.4	555.5	554.8	556.7	557.5	555.0
1940	567.7	567.7	567.7	567.7	567.7	566.8	559.5	553.5	547.0	542.7	547.9	555.0
1941	560.6	567.7	566.2	564.1	567.7	567.7	563.5	559.5	555.0	552.3	554.7	555.0
1942	567.7	567.7	553.7	557.4	567.7	567.7	567.6	562.7	557.1	552.3	559.1	555.0
1943	567.7	566.6	567.7	567.7	567.7	567.7	562.9	557.9	551.9	548.3	552.7	555.0
1944	559.9	559.3	566.1	567.7	567.7	555.1	549.4	545.7	541.0	538.6	549.1	555.0
1945	555.7	567.7	567.7	561.5	567.7	567.7	558.3	553.0	546.9	543.1	546.8	555.0
1946	553.9	543.5	534.4	525.2	567.7	563.3	557.1	553.0	549.0	547.7	554.0	555.0
1947	553.5	554.1	559.1	561.5	559.9	559.3	556.4	553.8	551.5	553.6	554.1	551.3
1948	558.4	554.1	555.9	567.7	560.1	567.7	560.4	552.7	544.0	535.8	542.1	549.5
1949	552.7	548.8	555.5	561.4	567.7	563.5	559.2	555.9	552.6	550.7	554.9	555.0
1950	565.2	567.7	567.7	567.7	567.7	567.7	561.6	555.3	549.0	545.2	567.7	567.7
1951	567.7	567.7	567.7	567.7	567.7	567.7	559.1	553.8	548.0	542.4	545.8	555.0
1952	567.7	567.7	567.7	567.7	567.7	567.7	559.6	549.2	538.8	546.6	555.0	
1953	567.7	562.8	567.7	567.7	567.7	567.7	566.5	560.1	554.4	551.7	556.7	555.0
1954	562.0	567.7	567.7	567.7	567.7	567.7	558.8	556.3	556.6	558.6	562.4	555.0
1955	558.2	556.4	563.2	567.2	567.7	567.7	560.5	557.5	554.2	552.4	554.9	567.7
1956	567.7	567.7	567.7	567.7	567.7	567.7	564.7	558.7	551.8	548.7	554.9	555.0
1957	561.0	567.7	567.7	566.5	567.7	567.7	559.0	550.2	542.1	538.8	548.4	555.0
1958	566.0	567.7	567.7	567.7	567.7	567.7	567.7	565.4	559.6	556.5	560.2	555.0
1959	562.6	567.7	567.7	567.7	563.3	560.5	555.7	553.1	550.5	549.5	552.5	555.0
1960	553.7	558.5	563.1	567.7	567.7	567.7	561.1	554.6	547.9	541.9	545.9	550.1
1961	550.5	546.9	545.8	545.9	539.5	537.5	535.2	532.3	529.8	527.5	526.6	524.9
1962	522.8	543.6	540.6	549.3	549.1	567.7	561.4	557.3	552.1	551.5	555.9	555.0
1963	563.5	567.7	565.7	567.7	567.7	567.7	561.3	555.9	549.8	545.6	552.8	555.0
1964	560.9	557.3	562.6	567.3	563.7	563.3	555.0	547.0	543.8	543.0	551.7	567.7
1965	567.7	567.7	561.1	567.7	567.7	567.7	560.6	559.3	563.8	567.7	567.7	555.0
1966	551.6	542.0	544.6	559.7	564.6	560.5	550.1	546.1	546.4	546.2	548.9	555.0
1967	567.7	562.2	567.7	567.7	567.7	567.7	567.7	563.5	559.0	555.9	560.0	555.0
1968	561.3	567.7	567.7	567.7	563.9	563.6	555.3	551.3	548.3	546.5	552.6	555.0
1969	567.7	567.7	567.7	567.7	567.7	567.7	567.7	565.3	562.2	560.8	561.4	555.0
1970	567.7	567.7	567.7	567.7	567.7	567.7	562.2	555.0	547.4	541.8	555.9	567.7
1971	566.8	563.0	566.7	565.3	565.6	567.7	566.1	567.7	566.0	566.5	564.8	555.0
1972	550.2	542.6	555.4	567.7	567.7	567.7	560.6	557.4	556.6	558.3	560.8	555.0
1973	567.7	567.7	566.7	566.3	567.7	567.7	562.5	556.8	551.8	549.9	561.4	567.7
1974	567.7	564.8	567.7	567.7	567.7	567.7	567.7	567.7	567.6	564.6	563.7	555.0
1975	556.1	563.9	567.7	561.6	567.7	567.7	567.2	567.7	567.7	567.7	567.7	555.0
1976	556.9	552.0	549.1	547.2	542.4	536.4	529.4	522.7	516.0	506.3	498.4	486.2
1977	476.9	459.1	443.2	437.2	438.5	436.8	435.0	432.8	433.1	420.1	403.8	396.5
1978	396.5	396.5	422.9	432.4	447.9	431.6	422.4	410.3	423.9	424.0	404.0	396.5
1979	420.1	448.5	504.0	537.3	559.9	567.7	560.9	547.1	531.5	523.5	534.9	549.8
1980	567.7	567.7	567.7	567.7	567.7	567.7	567.7	562.8	557.5	553.3	555.4	555.0
1981	566.5	567.7	567.7	567.7	564.3	560.7	554.2	547.9	542.8	541.7	552.7	567.7
1982	567.7	567.7	567.7	567.7	567.7	567.7	567.7	565.8	559.2	555.7	567.7	567.7
1983	567.7	567.7	567.7	567.7	567.7	567.7	567.7	567.7	567.7	567.7	567.7	567.7
1984	567.7	567.7	567.7	566.9	567.7	567.7	565.7	566.0	560.3	557.3	563.4	555.0
1985	546.1	547.8	564.1	567.7	563.5	561.4	552.8	550.6	550.3	552.6	557.8	555.0
1986	562.9	567.7	567.7	567.7	567.7	567.7	563.9	557.9	552.0	547.0	553.1	555.0
1987	557.2	556.0	559.9	560.5	553.1	547.4	546.5	545.4	543.1	534.4	529.4	527.6
1988	530.4	526.2	525.3	527.7	524.9	524.5	524.4	521.4	516.7	506.4	502.2	498.3
1989	492.3	486.9	521.2	551.2	567.7	567.7	561.9	554.6	548.4	537.0	546.2	553.3
1990	559.7	558.4	565.2	567.7	565.7	549.8	546.2	540.8	535.1	531.1	523.7	517.6
Minimum	396.5	396.5	422.9	432.4	438.5	431.6	422.2	410.3	423.9	420.1	403.8	396.5
Maximum	567.7	567.7	567.7	567.7	567.7	567.7	567.7	567.7	567.7	567.7	567.7	567.7
Average	550.8	551.7	554.3	557.3	560.0	559.2	554.6	549.8	545.1	541.4	545.0	546.1

## Total Pardee Releases in CFS

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1921	1,100	1,097	1,080	1,064	1,092	2,367	358	232	239	232	83	249
1922	297	679	1,005	435	1,914	4,247	513	278	288	278	206	623
1923	422	503	330	512	1,604	1,383	386	346	357	346	24	65
1924	0	0	0	0	128	132	128	128	132	128	0	0
1925	0	0	56	970	2,491	1,694	455	455	470	455	0	0
1926	0	0	0	0	230	238	336	230	238	230	66	187
1927	169	829	634	990	1,989	2,662	394	373	385	373	13	39
1928	154	65	863	1,009	2,327	315	304	304	315	304	0	0
1929	12	0	0	0	122	127	219	141	127	122	20	54
1930	0	0	0	254	358	1,028	312	312	323	312	0	0
1931	0	0	0	0	156	161	156	156	161	156	0	0
1932	345	516	806	0	523	2,062	399	360	372	360	26	72
1933	0	65	0	0	315	461	423	287	296	287	107	324
1934	164	15	78	0	215	223	215	215	223	215	0	0
1935	0	64	0	650	1,286	2,070	425	425	439	425	0	0
1936	0	1,872	1,100	1,100	2,509	1,963	403	324	335	324	58	172
1937	62	187	1,050	1,100	1,680	1,467	439	307	317	307	107	321
1938	243	926	2,079	1,573	4,755	3,968	601	559	578	559	0	0
1939	3	0	0	0	137	141	207	137	141	137	5	0
1940	90	1,154	1,462	1,157	3,144	1,100	417	343	355	343	56	177
1941	332	568	1,100	1,100	1,677	2,286	460	298	308	298	136	408
1942	648	969	1,100	1,002	2,314	3,519	568	357	369	357	201	591
1943	760	960	2,089	2,086	2,820	1,441	432	359	371	359	60	172
1944	0	0	127	115	499	880	336	248	256	248	51	151
1945	296	771	686	970	1,400	2,035	531	325	335	325	188	571
1946	740	787	970	1,080	1,229	1,100	379	255	263	255	89	256
1947	287	174	0	360	245	189	208	183	189	183	0	0
1948	0	0	0	217	1,100	2,151	420	420	434	420	0	0
1949	73	0	46	610	890	968	336	238	246	238	57	159
1950	0	652	750	1,193	1,525	2,062	412	359	371	359	1,819	4,067
1951	1,242	1,096	1,113	1,683	2,023	538	510	340	351	340	155	474
1952	838	1,265	1,344	1,807	4,331	3,984	1,075	568	586	568	31	100
1953	347	529	377	966	829	1,691	496	396	409	396	97	280
1954	0	29	578	879	1,027	280	398	212	178	172	159	466
1955	79	121	0	0	362	462	359	225	232	225	90	1,950
1956	2,693	1,297	1,186	1,281	2,719	2,875	499	373	386	373	117	338
1957	0	36	492	396	1,071	1,740	413	366	378	366	35	105
1958	48	1,067	1,291	2,207	2,864	3,184	561	373	386	373	116	330
1959	0	243	292	41	180	186	254	180	186	180	18	43
1960	0	0	0	5	548	496	322	322	333	322	0	0
1961	19	0	0	0	234	242	234	234	242	234	0	0
1962	0	0	582	833	720	1,119	420	310	320	310	89	260
1963	87	940	481	1,398	3,088	1,915	468	379	392	379	84	240
1964	207	335	0	0	248	405	340	248	256	248	53	2,494
1965	2,281	1,126	1,100	1,302	1,790	2,286	737	348	351	391	601	857
1966	412	330	239	0	168	174	444	231	174	168	201	608
1967	422	763	1,103	1,601	2,233	3,779	1,648	370	382	370	159	463
1968	77	131	390	271	209	216	345	209	216	209	89	265
1969	1,950	1,602	1,238	2,218	4,184	3,271	721	457	473	457	255	755
1970	1,915	1,096	1,286	999	1,252	1,586	491	387	400	387	101	502
1971	743	805	817	917	662	1,656	583	389	332	321	227	673
1972	374	341	151	21	230	767	430	225	174	169	193	565
1973	539	1,139	1,016	954	1,777	1,287	502	318	329	318	167	716
1974	1,159	825	1,509	1,603	1,867	1,933	568	476	323	312	153	440
1975	30	0	810	1,100	1,135	2,559	667	454	459	369	302	679
1976	17	0	0	0	67	69	67	67	69	67	0	0
1977	0	0	0	0	0	0	0	0	0	0	0	0
1978	0	0	0	0	0	0	157	194	101	100	152	99
1979	22	0	0	104	463	727	463	463	478	463	0	0
1980	1,844	2,346	1,526	1,127	1,759	2,437	837	333	345	333	90	259
1981	0	158	306	354	231	239	336	231	239	231	65	502
1982	1,489	2,642	2,318	3,838	4,261	2,624	835	528	546	528	627	1,659
1983	1,692	2,380	3,789	2,061	3,021	5,824	2,953	699	541	534	1,637	2,638
1984	1,470	1,205	1,237	1,026	1,923	1,411	582	363	376	363	214	621
1985	313	164	0	548	270	158	353	194	158	153	131	380
1986	254	4,354	2,879	1,762	2,745	1,804	436	396	410	396	38	103
1987	0	0	0	0	136	140	136	136	140	136	0	0
1988	0	0	0	0	151	156	151	151	156	151	0	0
1989	0	0	0	167	812	822	406	403	416	403	5	0
1990	55	107	0	27	294	788	294	294	304	294	0	0

Minimum	0	0	0	0	0	0	0	0	0	0	0	0
Maximum	2,693	4,354	3,789	3,838	4,755	5,824	2,953	699	586	568	1,819	4,067
Average	412	590	669	758	1,322	1,432	467	311	311	301	140	407

## Camanche Reservoir Storage in Acre-Feet

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1921	338,353	360,536	386,101	430,879	409,141	430,879	396,878	361,757	337,566	318,935	301,516	301,021
1922	310,343	336,506	388,809	396,388	334,188	430,879	399,567	360,437	332,343	310,914	302,323	320,552
1923	318,571	323,050	331,753	346,553	386,741	396,169	368,411	344,783	332,318	324,175	301,970	287,368
1924	282,082	277,952	267,182	253,228	231,373	217,945	209,790	201,822	201,114	198,770	183,189	171,753
1925	161,731	155,587	148,935	190,452	297,706	365,771	356,390	351,246	355,591	362,757	346,566	332,875
1926	321,389	312,773	299,741	282,982	257,449	246,366	238,285	226,938	224,138	226,107	217,176	214,790
1927	215,186	257,349	284,308	326,528	375,045	430,879	393,338	361,164	340,087	331,619	307,599	291,983
1928	289,218	283,725	273,355	316,960	412,210	372,775	355,173	344,071	343,126	344,181	323,476	305,650
1929	295,379	285,049	274,182	260,683	238,511	225,526	222,138	214,369	212,929	209,432	194,336	184,750
1930	181,026	176,972	166,301	168,240	159,363	196,121	193,614	191,397	199,004	205,663	190,098	176,077
1931	171,223	166,462	155,379	141,965	142,975	132,123	128,177	123,552	125,410	127,861	118,655	114,022
1932	129,313	157,662	198,521	187,224	180,705	278,363	273,843	270,130	274,996	284,004	269,080	260,004
1933	249,886	242,287	230,043	216,167	204,654	207,373	207,628	200,059	200,995	206,587	196,418	206,935
1934	212,516	212,520	206,055	192,057	176,468	168,955	165,988	163,398	168,254	171,034	156,206	143,225
1935	132,729	125,198	113,933	138,873	178,830	276,999	274,095	274,394	283,251	296,784	280,571	267,040
1936	259,928	301,269	336,323	362,679	408,948	430,879	394,762	360,424	337,030	322,749	303,352	296,896
1937	291,278	301,269	327,194	375,326	415,220	425,277	395,971	365,175	345,161	334,556	319,677	263,759
1938	265,519	258,403	284,328	231,453	335,152	430,879	396,664	366,762	348,614	342,172	317,431	296,032
1939	284,377	274,726	264,097	250,095	229,650	216,784	212,786	204,871	204,740	202,472	186,656	173,123
1940	171,719	233,029	297,290	348,566	430,893	423,643	398,047	374,493	361,529	351,365	332,293	327,702
1941	316,889	301,269	330,508	381,895	399,000	430,879	394,167	354,126	325,186	311,037	297,150	295,652
1942	257,378	254,364	310,720	353,306	349,140	430,879	396,347	355,562	326,181	310,088	289,099	297,642
1943	255,389	252,763	273,355	351,129	413,952	419,555	387,091	356,867	337,646	326,948	307,319	298,474
1944	287,814	282,053	279,794	269,632	260,922	287,963	279,533	268,934	267,081	269,968	259,658	255,856
1945	261,269	290,297	322,427	362,213	382,162	423,751	397,113	364,367	342,511	331,703	311,946	281,665
1946	287,819	320,039	368,041	413,870	430,893	424,998	398,489	370,908	354,029	339,927	324,317	321,404
1947	326,386	326,148	314,474	317,815	292,965	278,943	262,712	248,257	242,418	242,108	226,227	212,326
1948	200,774	190,037	178,935	176,137	203,647	304,579	299,235	297,116	303,678	311,627	295,005	282,156
1949	274,502	264,074	259,268	277,291	292,615	324,617	315,895	304,439	301,615	303,001	290,371	286,184
1950	275,215	301,269	327,194	372,960	395,177	430,879	391,783	356,261	332,434	321,951	231,453	231,453
1951	231,453	231,453	273,355	351,129	424,690	390,947	378,312	361,681	355,351	348,046	336,660	328,570
1952	301,269	301,269	319,236	240,437	306,213	422,935	403,132	359,091	328,044	319,642	296,558	282,774
1953	294,853	257,693	269,024	309,602	308,928	343,780	329,653	315,888	312,362	309,223	293,184	291,764
1954	279,911	270,771	295,471	325,426	348,654	339,787	334,695	321,469	314,548	309,093	302,908	320,433
1955	319,391	316,724	303,564	286,989	269,607	271,792	264,866	252,950	249,582	250,504	239,963	244,416
1956	231,453	247,430	300,244	352,094	378,019	430,879	391,170	350,563	321,623	305,073	287,914	288,636
1957	278,272	270,966	293,156	299,387	320,996	364,459	351,332	341,789	342,530	339,539	319,222	307,853
1958	299,496	301,269	327,194	354,084	363,067	430,879	389,335	343,121	308,733	291,466	274,414	273,910
1959	263,246	270,864	276,836	265,705	245,236	231,408	224,950	214,248	214,467	212,693	197,437	186,423
1960	181,475	178,155	173,500	160,789	163,425	168,636	167,062	165,709	174,149	181,449	166,377	156,720
1961	152,527	147,624	136,874	123,807	129,808	123,818	122,545	121,616	127,854	134,962	125,434	116,707
1962	109,564	110,297	138,980	181,486	194,521	236,414	240,175	237,294	239,453	247,741	236,795	239,816
1963	231,935	233,443	252,507	322,094	406,958	430,879	395,058	360,436	337,014	326,115	293,195	288,665
1964	292,620	300,566	287,940	269,907	246,055	245,424	237,580	227,323	225,720	229,318	216,780	240,437
1965	244,958	257,559	312,029	363,248	385,615	423,369	390,812	341,665	303,230	291,985	293,130	328,390
1966	335,399	345,182	346,694	328,565	299,014	283,997	282,278	270,653	263,834	261,181	258,621	285,541
1967	301,088	313,071	326,109	354,867	288,669	406,300	419,571	360,917	314,491	294,400	281,471	290,082
1968	286,494	285,512	300,639	298,550	271,704	259,351	251,719	239,190	235,071	235,604	226,373	230,958
1969	294,035	301,088	326,109	314,413	352,094	430,879	393,927	347,817	313,866	298,653	289,755	315,976
1970	231,212	231,212	280,107	321,662	347,544	376,648	362,956	349,377	346,116	343,272	314,245	301,088
1971	303,145	311,318	328,399	364,910	347,654	373,984	358,877	338,376	324,362	315,175	307,204	328,390
1972	337,899	347,618	344,437	328,160	302,341	322,568	319,650	307,388	301,080	298,489	295,726	317,329
1973	301,088	301,088	328,397	367,087	415,372	416,924	394,065	366,458	349,603	339,745	270,463	263,467
1974	252,977	283,501	319,296	371,387	399,904	424,363	390,016	355,652	322,455	306,550	293,714	302,180
1975	292,532	286,419	326,109	374,457	361,081	416,813	381,861	341,086	310,384	298,074	293,771	316,183
1976	310,273	305,205	294,102	280,501	254,877	237,610	225,542	214,178	209,765	202,834	186,974	173,010
1977	164,283	156,405	147,810	133,976	125,677	105,367	92,275	78,660	71,599	65,048	55,592	49,285
1978	45,733	43,063	38,656	31,909	24,454	5,552	4,000	4,000	4,000	4,000	4,000	4,000
1979	4,000	6,502	4,186	4,000	23,176	43,824	52,899	61,887	79,990	99,646	90,721	85,681
1980	198,423	248,696	308,806	355,651	372,653	421,359	397,641	348,946	311,750	297,287	280,081	277,395
1981	268,638	267,366	278,499	281,935	256,494	245,563	237,491	226,237	223,584	225,968	216,337	231,152
1982	245,863	231,152	270,642	292,045	374,401	419,874	380,399	329,144	292,406	277,113	236,759	243,150
1983	270,401	281,072	317,487	331,475	247,310	369,638	430,893	360,682	293,881	267,025	231,152	231,152
1984	231,152	240,075	290,357	333,554	389,010	396,202	376,386	349,656	333,613	325,703	306,907	327,346
1985	334,995	334,221	325,434	339,595	316,031	300,060	292,571	278,626	271,126	268,043	262,812	274,008
1986	277,227	236,156	272,873	351,129	407,259	427,496	388,103	353,130	331,559	318,587	296,121	280,999
1987	274,749	272,188	264,919	250,723	229,433	216,549	208,203	200,281	199,764	197,588	181,933	169,760
1988	165,588	160,129	148,611	135,928	136,671	125,569	121,462	116,666	118,326	120,367	111,789	104,457
1989	101,009	98,419	97,505	101,284	120,561	145,497	149,350	153,167	167,534	180,776	166,114	155,665
1990	154,702</td											

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Composite Program II - GFS Eqn for Maint. of Camanche Hypol

Fish Releases per Production Goal Faxed 1-2-92 w/Ramping

Drought Planning Sequence - 1976-1977-185 TAF

## Camanche Reservoir Elevation in Feet

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1921	222.6	225.9	229.5	235.5	232.6	235.5	231.0	226.1	222.5	219.7	217.0	216.9
1922	218.4	222.4	229.8	230.9	222.0	235.5	231.3	225.9	221.7	218.5	217.1	220.0
1923	219.7	220.3	221.7	223.9	229.6	230.9	227.0	223.6	221.7	220.5	217.1	214.7
1924	213.9	213.2	211.4	209.0	205.2	202.7	201.2	199.7	199.5	199.0	195.7	193.3
1925	191.2	189.8	188.3	197.3	216.4	226.6	225.3	224.5	225.2	226.2	223.9	221.8
1926	220.1	218.8	216.7	214.0	209.7	207.8	206.4	204.4	203.8	204.2	202.6	202.1
1927	202.2	209.7	214.2	220.9	227.9	235.5	230.5	226.0	222.9	221.6	218.0	215.5
1928	215.0	214.1	212.4	219.4	233.0	227.6	225.1	223.5	223.4	223.5	220.4	217.7
1929	216.0	214.4	212.6	210.3	206.4	204.1	203.5	202.0	201.8	201.1	198.1	196.1
1930	195.3	194.4	192.2	192.6	190.7	198.5	197.9	197.5	199.1	200.4	197.2	194.2
1931	193.2	192.2	189.8	186.7	187.0	184.3	183.3	182.2	182.6	183.3	180.9	179.6
1932	183.6	190.3	199.0	196.6	195.2	213.3	212.5	211.9	212.7	214.2	211.7	210.2
1933	208.4	207.1	204.9	202.4	200.2	200.7	200.8	199.3	199.5	200.6	198.5	200.6
1934	201.7	201.7	200.5	197.6	194.3	192.7	192.1	191.5	192.6	193.2	190.0	187.0
1935	184.5	182.6	179.6	186.0	194.8	213.0	212.6	212.6	214.1	216.3	213.6	211.4
1936	210.2	217.0	222.3	226.2	232.6	235.5	230.7	225.9	222.4	220.3	217.3	216.3
1937	215.4	217.0	221.0	228.0	233.4	234.7	230.8	226.5	223.6	222.1	219.8	210.8
1938	211.1	209.9	214.2	205.2	222.2	235.5	230.9	226.8	224.2	223.2	219.5	216.1
1939	214.3	212.7	210.9	208.5	204.8	202.5	201.7	200.2	200.2	199.8	196.5	193.6
1940	193.3	205.5	216.3	224.1	235.5	234.5	231.1	227.9	226.0	224.6	221.7	221.0
1941	219.4	217.0	221.5	228.9	231.2	235.5	230.6	225.0	220.7	218.5	216.3	216.1
1942	209.7	209.2	218.4	224.8	224.2	235.5	230.9	225.2	220.8	218.3	215.0	216.4
1943	209.4	208.9	212.4	224.5	233.2	234.0	229.6	225.4	222.5	220.9	217.9	216.5
1944	214.8	213.9	213.5	211.8	210.3	214.8	213.5	211.7	211.4	211.9	210.1	209.5
1945	210.4	215.2	220.2	226.1	228.9	234.5	231.0	226.4	223.3	221.7	218.6	213.8
1946	214.8	219.9	226.9	233.2	235.5	234.7	231.2	227.4	224.9	222.9	220.5	220.1
1947	220.9	220.8	219.0	219.5	215.6	213.4	210.6	208.2	207.1	207.1	204.2	201.6
1948	199.5	197.2	194.9	194.3	200.0	217.5	216.6	216.3	217.3	218.6	216.0	213.9
1949	212.6	210.9	210.1	213.1	215.6	220.6	219.2	217.5	217.0	217.2	215.2	214.5
1950	212.7	217.0	221.0	227.6	230.7	235.5	230.3	225.3	221.8	220.2	205.2	205.2
1951	205.2	205.2	212.4	224.5	234.7	230.1	228.4	226.0	225.1	224.1	222.4	221.2
1952	217.0	217.0	219.8	206.8	217.7	234.4	231.8	225.7	221.1	219.8	216.2	214.0
1953	215.9	209.8	211.7	218.3	218.2	223.4	221.3	219.2	218.7	218.2	215.7	215.4
1954	213.5	212.0	216.0	220.7	224.2	222.9	222.1	220.1	219.0	218.2	217.2	219.9
1955	219.8	219.4	217.3	214.7	211.8	212.2	211.0	209.0	208.4	208.5	206.7	207.5
1956	205.2	208.0	216.8	224.7	228.4	235.5	230.2	224.4	220.1	217.6	214.8	214.9
1957	213.2	212.0	215.7	216.7	220.0	226.4	224.6	223.2	223.3	222.8	219.8	218.0
1958	216.7	217.0	221.0	225.0	226.2	235.5	229.9	223.3	218.1	215.4	212.6	212.5
1959	210.7	212.0	213.0	211.2	207.6	205.2	204.0	202.0	202.0	201.7	198.7	196.4
1960	195.4	194.7	193.7	191.0	191.5	192.7	192.3	192.0	193.8	195.4	192.2	190.1
1961	189.1	188.0	185.5	182.2	183.8	182.2	181.9	181.7	183.3	185.0	182.6	180.3
1962	178.4	178.6	186.0	195.4	198.1	206.1	206.7	206.2	206.6	208.1	206.1	206.7
1963	205.3	205.5	208.9	220.2	232.3	235.5	230.7	225.9	222.4	220.8	215.7	214.9
1964	215.6	216.9	214.8	211.9	207.8	207.7	206.3	204.4	204.1	204.8	202.5	206.8
1965	207.6	209.8	218.7	226.3	229.4	234.5	230.1	223.1	217.3	215.5	215.7	221.2
1966	222.2	223.7	223.9	221.2	216.6	214.2	213.9	212.0	210.8	210.4	209.9	214.4
1967	216.9	218.8	220.8	225.1	214.9	232.2	234.0	225.9	219.0	215.9	213.8	215.2
1968	214.6	214.4	216.9	216.5	212.2	210.1	208.8	206.6	205.8	205.9	204.2	205.1
1969	215.8	216.9	220.8	219.0	224.7	235.5	230.5	224.0	218.9	216.5	215.1	219.3
1970	205.1	205.1	213.6	220.1	224.0	228.2	226.2	224.3	223.8	223.4	219.0	216.9
1971	217.3	218.5	221.2	226.5	224.0	227.8	225.6	222.6	220.5	219.1	217.9	221.2
1972	222.6	224.0	223.5	221.1	217.1	220.3	219.8	217.9	216.9	216.5	216.1	219.5
1973	216.9	216.9	221.2	226.8	233.4	233.6	230.6	226.7	224.3	222.9	212.0	210.8
1974	209.0	214.1	219.8	227.4	231.4	234.6	230.0	225.2	220.3	217.8	215.8	217.1
1975	215.6	214.6	220.8	227.9	226.0	233.6	228.9	223.0	218.4	216.5	215.8	219.3
1976	218.4	217.6	215.8	213.6	209.3	206.3	204.1	202.0	201.2	199.9	196.5	193.6
1977	191.7	190.0	188.1	184.8	182.7	177.1	173.1	168.5	165.9	163.4	159.5	156.0
1978	154.0	152.4	149.8	145.3	139.7	120.9	118.9	118.9	118.9	118.9	118.9	118.9
1979	118.9	122.0	119.2	118.9	138.7	152.9	157.9	162.1	169.0	175.4	172.6	170.9
1980	198.9	208.2	218.1	225.2	227.6	234.2	231.1	224.2	218.6	216.3	213.5	213.1
1981	211.6	211.4	213.3	213.9	209.6	207.7	206.3	204.2	203.7	204.2	202.4	205.1
1982	207.7	205.1	212.0	215.5	227.8	234.0	228.7	221.3	215.6	213.1	206.1	207.3
1983	211.9	213.7	219.5	221.6	208.0	227.2	235.5	225.9	215.8	211.4	205.1	205.1
1984	205.1	206.7	215.2	221.9	229.9	230.9	228.1	224.3	221.9	220.7	217.9	221.0
1985	222.1	222.0	220.7	222.8	219.3	216.8	215.6	213.3	212.1	211.5	210.7	212.5
1986	213.1	206.0	212.4	224.5	232.4	235.0	229.7	224.8	221.6	219.7	216.1	213.7
1987	212.7	212.2	211.0	208.6	204.8	202.4	200.9	199.4	199.2	198.8	195.5	192.9
1988	192.0	190.8	188.3	185.3	185.5	182.7	181.6	180.3	180.8	181.3	179.0	176.9
1989	175.8	175.0	174.8	175.9	181.4	187.5	188.4	189.3	192.4	195.2	192.1	189.8
1990	189.6	190.0	187.4	184.7	182.2	188.6	189.1	189.6	191.7	193.3	189.9	186.8
Minimum	118.9	122.0	119.2	118.9	138.7	120.9	118.9	118.9	118.9	118.9	118.9	118.9
Maximum	222.6	225.9	229.8	235.5	235.5	235.5	235.5	227.9	226.0	226.2	223.9	221.8
Average	206.3	206.9	209.2	211.5	213.3	216.9	214.8	211.8	210.2	209.6	206.7	206.1

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Composite Program II - GFS Eqn for Maint. of Camanche Hypol

Fish Releases per Production Goal Faxed 1-2-92 w/Ramping

Drought Planning Sequence - 1976-1977-185 TAF

## Total Camanche Releases in CFS

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1921	691	773	710	287	1,398	1,935	824	722	588	501	356	300
1922	185	311	195	278	2,881	2,557	936	834	700	595	356	388
1923	511	459	200	278	903	1,159	754	652	518	443	373	300
1924	85	74	171	210	441	309	200	200	100	150	253	214
1925	200	200	201	278	711	493	527	461	338	306	256	220
1926	200	200	200	278	603	371	402	352	237	178	256	220
1927	200	200	200	278	1,151	1,661	918	816	682	490	420	300
1928	201	200	1,101	278	725	912	509	408	271	247	356	300
1929	201	200	184	210	441	309	211	207	105	150	253	214
1930	94	92	201	208	472	368	295	294	152	178	253	214
1931	93	92	177	210	113	309	174	188	96	96	153	139
1932	116	108	135	173	603	371	402	352	237	178	256	220
1933	200	200	200	208	472	368	359	352	237	178	256	220
1934	93	92	171	210	441	309	211	207	105	150	253	214
1935	200	200	201	278	603	371	402	352	237	178	256	220
1936	200	1,490	533	641	1,708	1,538	904	802	668	528	356	300
1937	201	188	802	278	978	1,234	829	727	593	446	356	1,247
1938	243	1,277	1,785	2,449	3,025	2,294	1,070	965	823	640	393	343
1939	201	182	184	210	441	309	211	207	105	150	253	214
1940	200	200	481	278	1,753	1,152	746	645	511	478	356	300
1941	564	913	680	288	1,346	1,682	971	869	735	494	356	474
1942	1,398	1,071	202	296	2,349	2,080	1,043	940	803	581	573	463
1943	1,560	1,043	1,883	774	1,744	1,279	874	771	634	501	369	314
1944	185	182	185	278	603	371	402	352	237	178	256	220
1945	200	376	200	278	1,027	1,284	878	776	642	484	531	1,111
1946	642	224	200	278	912	1,129	724	622	488	452	356	300
1947	201	182	200	278	603	371	402	352	237	178	256	220
1948	183	200	200	278	634	402	433	383	268	259	256	220
1949	200	200	200	278	603	371	402	352	237	178	256	220
1950	237	255	339	405	1,114	1,394	962	857	716	519	3,394	4,168
1951	1,343	1,129	442	354	781	1,038	632	530	396	432	356	677
1952	1,432	1,321	1,145	3,119	3,219	1,960	1,310	1,203	1,059	665	406	359
1953	188	1,182	185	278	796	1,053	647	546	411	419	356	300
1954	201	200	200	360	603	371	402	352	237	223	256	220
1955	200	182	200	278	603	371	402	352	237	178	256	2,050
1956	3,079	1,027	312	396	2,269	1,920	1,058	954	815	617	378	326
1957	185	182	185	278	695	949	546	444	307	384	356	300
1958	228	1,164	1,041	1,940	2,678	1,979	1,150	1,046	907	617	380	328
1959	201	182	185	208	470	368	295	294	152	178	253	214
1960	93	92	102	208	472	368	295	294	152	178	256	149
1961	92	92	177	210	113	309	211	207	105	96	153	139
1962	116	108	135	103	472	368	295	294	235	178	256	220
1963	216	989	200	278	1,665	1,445	963	862	727	538	659	300
1964	185	182	200	278	603	371	402	352	237	178	256	2,337
1965	2,309	900	213	440	1,372	1,585	1,180	1,077	941	540	595	316
1966	325	182	200	278	603	371	402	352	237	178	256	220
1967	334	559	940	1,231	3,267	1,752	1,347	1,243	1,104	667	378	326
1968	185	182	185	278	603	371	402	352	237	178	256	220
1969	1,107	1,678	857	2,421	3,521	1,883	1,235	1,129	986	683	399	351
1970	3,426	1,109	548	284	781	1,038	633	531	396	402	637	803
1971	722	655	567	278	897	1,153	748	646	512	434	356	388
1972	216	182	185	278	603	371	402	352	237	178	256	220
1973	944	1,293	648	278	937	1,193	788	686	552	473	1,354	909
1974	1,395	285	958	737	1,350	1,463	1,057	955	821	547	356	300
1975	185	182	236	278	1,302	1,558	1,153	1,051	917	556	356	300
1976	102	92	172	210	441	309	200	200	100	150	253	214
1977	139	140	135	213	113	309	174	188	96	96	153	98
1978	56	48	70	108	113	309	174	188	96	96	153	98
1979	56	48	71	106	144	368	295	294	152	134	153	98
1980	116	1,570	573	324	1,435	1,553	1,147	1,045	911	532	356	300
1981	201	182	185	278	603	371	402	352	237	178	256	290
1982	1,379	3,001	1,817	3,587	2,877	1,797	1,393	1,284	1,136	777	1,382	1,690
1983	1,456	2,319	3,464	1,843	4,352	3,712	1,872	1,760	1,612	944	2,331	2,776
1984	1,495	1,081	424	278	970	1,227	821	720	585	474	584	300
1985	185	182	185	278	603	371	402	352	237	178	256	220
1986	243	5,287	2,410	466	1,783	1,396	991	886	744	570	392	343
1987	108	74	156	210	441	309	211	207	105	150	253	214
1988	93	92	178	210	113	309	174	188	96	96	153	139
1989	56	48	71	106	472	368	295	294	152	178	253	157
1990	94	94	188	210	438	309	211	207	105	150	253	214
Minimum	56	48	70	103	113	309	174	188	96	96	153	98
Maximum	3,426	5,287	3,464	3,587	4,352	3,712	1,872	1,760	1,612	944	3,394	4,168
Average	491	584	467	492	1,091	962	638	576	451	350	423	475

92 229 10-9994-WSIP

Composite Program II - GFS Eqn for Maint. of Camanche Hypol

Fish Releases per Production Goal Faxed 1-2-92 w/Ramping

Drought Planning Sequence - 1976-1977-185 TAF

## Flow at Victor (Bruella Rd) CFS

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1921	654	736	665	231	1,191	1,686	570	519	428	377	337	274
1922	164	274	167	231	2,674	2,308	682	631	540	471	337	346
1923	473	423	172	231	696	910	500	449	358	319	337	274
1924	172	163	171	178	406	220	163	165	73	126	237	195
1925	178	181	173	231	533	283	317	286	195	192	237	195
1926	178	181	172	231	533	283	317	286	195	154	237	195
1927	178	181	172	231	944	1,411	664	613	521	365	384	274
1928	180	181	1,057	231	533	747	337	286	195	204	337	274
1929	180	181	156	178	406	220	175	173	79	126	237	195
1930	180	181	173	176	437	280	259	259	126	154	237	195
1931	180	181	171	178	78	220	138	153	70	77	137	120
1932	95	89	107	126	533	283	317	286	195	154	237	195
1933	178	181	172	176	437	280	317	286	195	154	237	195
1934	180	181	171	178	406	220	175	173	79	126	237	195
1935	178	181	173	231	533	283	317	286	195	154	237	195
1936	178	1,454	489	510	1,501	1,289	650	599	508	404	337	274
1937	180	170	758	231	771	985	575	524	433	322	337	1,205
1938	209	1,229	1,727	2,303	2,802	2,028	799	746	649	506	362	305
1939	180	163	156	178	406	220	175	173	79	126	237	195
1940	178	181	453	231	1,547	902	493	442	350	353	337	274
1941	526	877	636	231	1,140	1,433	717	666	575	370	337	432
1942	1,356	1,030	169	244	2,136	1,824	783	732	638	454	533	417
1943	1,518	1,003	1,834	638	1,532	1,024	614	563	469	374	346	285
1944	164	163	157	231	533	283	317	286	195	154	237	195
1945	178	340	172	231	821	1,034	624	574	482	359	495	1,070
1946	604	187	172	231	706	880	470	419	328	328	337	274
1947	164	163	172	231	533	283	317	286	195	154	237	195
1948	162	181	172	231	533	283	317	286	195	154	237	195
1949	178	181	172	231	533	283	317	286	195	154	237	195
1950	204	209	282	262	894	1,130	693	640	544	387	3,349	4,116
1951	1,305	1,093	398	231	575	788	378	328	236	308	337	636
1952	1,377	1,269	1,081	2,968	2,991	1,687	1,033	979	880	528	372	316
1953	167	1,145	157	231	590	803	393	343	251	295	337	274
1954	180	163	172	231	533	283	317	286	195	200	237	195
1955	178	163	172	231	533	283	317	286	195	154	237	2,009
1956	3,033	983	259	256	2,053	1,660	794	742	647	487	352	293
1957	164	163	157	231	533	747	337	286	195	260	337	274
1958	198	1,120	988	1,800	2,461	1,718	885	832	737	486	354	294
1959	180	163	157	176	435	280	259	259	126	154	237	195
1960	180	181	172	176	437	280	259	259	126	154	237	199
1961	178	181	170	178	78	220	175	173	79	77	137	120
1962	95	89	107	71	437	280	259	259	195	154	237	195
1963	178	953	172	231	1,458	1,196	709	659	567	414	623	274
1964	164	163	172	231	533	283	317	286	195	154	237	2,296
1965	2,267	860	181	306	1,161	1,331	921	870	776	413	555	283
1966	288	163	172	231	533	283	317	286	195	154	237	195
1967	289	516	887	1,092	3,050	1,492	1,082	1,030	935	537	352	293
1968	164	163	157	231	533	283	317	286	195	154	237	195
1969	1,054	1,628	796	2,272	3,295	1,613	961	907	809	547	367	310
1970	3,387	1,071	502	236	573	787	377	326	234	276	600	760
1971	684	618	522	231	690	904	494	443	352	310	337	347
1972	178	163	157	231	533	283	317	286	195	154	237	195
1973	907	1,256	603	231	730	944	534	484	392	349	1,318	868
1974	1,358	248	914	606	1,143	1,213	803	753	661	423	337	274
1975	164	163	202	231	1,095	1,309	899	848	757	432	337	274
1976	188	181	165	178	406	220	163	165	73	126	237	195
1977	178	181	165	181	78	220	138	153	70	77	137	120
1978	95	89	99	76	78	220	138	153	70	77	137	120
1979	95	89	100	74	109	280	259	259	126	114	137	120
1980	95	1,534	529	231	1,228	1,303	893	843	751	408	337	274
1981	180	163	157	231	533	283	317	286	195	154	237	265
1982	1,317	2,942	1,745	3,427	2,640	1,515	1,106	1,051	950	634	1,325	1,624
1983	1,394	2,261	3,393	1,683	4,115	3,431	1,586	1,528	1,426	801	2,274	2,710
1984	1,458	1,045	380	231	764	977	567	517	425	350	548	274
1985	164	163	157	231	533	283	317	286	195	154	237	195
1986	209	5,239	2,351	321	1,561	1,129	720	667	570	436	362	304
1987	195	163	156	178	406	220	175	173	79	126	237	195
1988	180	181	172	178	78	220	138	153	70	77	137	120
1989	95	89	100	74	437	280	259	259	126	154	237	195
1990	180	182	181	178	403	220	175	173	79	130	237	195
Minimum	95	89	99	71	78	220	138	153	70	77	137	120
Maximum	3,387	5,239	3,393	3,427	4,115	3,431	1,586	1,528	1,426	801	3,349	4,116
Average	481	574	438	427	958	790	479	446	352	273	399	449

## Flow Below Lodi Lake in CFS

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1921	608	696	608	124	1,006	1,436	281	254	252	281	299	228
1922	118	234	109	124	2,489	2,058	393	366	364	376	299	300
1923	428	383	114	124	511	660	211	184	182	224	299	228
1924	126	123	114	124	348	30	43	31	22	68	199	149
1925	133	141	115	124	348	33	29	21	19	97	199	149
1926	133	141	114	124	348	33	29	21	19	59	199	149
1927	133	141	114	124	759	1,161	375	348	345	270	346	228
1928	134	141	99	124	348	497	48	21	19	109	299	228
1929	134	141	99	124	348	30	29	21	19	68	199	149
1930	135	141	115	122	348	30	29	21	19	59	199	149
1931	134	141	114	124	21	30	18	19	19	19	99	74
1932	49	49	49	19	348	33	29	21	19	59	199	149
1933	133	141	114	122	348	30	29	21	19	59	199	149
1934	134	141	114	124	348	30	29	21	19	68	199	149
1935	133	141	115	124	348	33	29	21	19	59	199	149
1936	133	1,413	431	402	1,316	1,039	361	334	332	308	299	228
1937	134	130	700	124	586	735	286	259	257	227	299	1,159
1938	133	1,162	1,636	2,160	2,579	1,738	470	443	441	387	299	228
1939	134	123	99	124	348	30	29	21	19	68	199	149
1940	133	141	395	124	1,361	653	204	177	174	258	299	228
1941	481	837	578	124	954	1,183	428	401	399	274	299	386
1942	1,300	980	99	124	1,938	1,560	480	453	451	350	487	360
1943	1,462	954	1,765	519	1,333	761	312	285	282	271	299	228
1944	118	123	99	124	348	33	29	21	19	59	199	149
1945	133	300	114	124	635	784	336	308	306	264	457	1,024
1946	559	147	114	124	520	630	181	154	152	233	299	228
1947	118	123	114	124	348	33	29	21	19	59	199	149
1948	116	141	114	124	348	33	29	21	19	59	199	149
1949	133	141	114	124	348	33	29	21	19	59	199	149
1950	133	146	197	124	677	847	370	343	341	271	3,290	4,044
1951	1,260	1,053	340	124	389	538	90	62	60	213	299	590
1952	1,290	1,192	979	2,812	2,754	1,384	690	662	660	400	299	228
1953	121	1,105	99	124	404	553	105	78	75	200	299	228
1954	134	123	114	124	348	33	29	21	19	105	199	149
1955	133	123	114	124	348	33	29	21	19	59	199	1,963
1956	2,969	927	181	127	1,845	1,387	481	453	451	377	299	228
1957	118	123	99	124	348	497	48	21	19	165	299	228
1958	133	1,063	908	1,669	2,251	1,442	570	543	540	375	299	228
1959	134	123	99	122	348	30	29	21	19	59	199	149
1960	134	141	114	122	348	30	29	21	19	59	199	154
1961	133	141	114	124	21	30	29	21	19	19	99	74
1962	49	49	49	17	348	30	29	21	19	59	199	149
1963	133	913	114	124	1,273	946	421	394	391	319	586	228
1964	118	123	114	124	348	33	29	21	19	59	199	2,250
1965	2,213	812	114	187	965	1,069	620	593	591	311	510	228
1966	242	123	114	124	348	33	29	21	19	59	199	149
1967	225	459	809	962	2,842	1,218	769	742	740	427	299	228
1968	118	123	99	124	348	33	29	21	19	59	199	149
1969	972	1,556	699	2,123	3,065	1,317	624	597	595	424	299	228
1970	3,337	1,027	440	124	383	532	83	56	53	178	559	710
1971	639	578	465	124	505	654	205	178	176	215	299	301
1972	133	123	99	124	348	33	29	21	19	59	199	149
1973	861	1,216	546	124	545	694	245	218	216	254	1,281	822
1974	1,312	208	856	499	958	963	515	487	485	328	299	228
1975	118	123	145	124	910	1,059	610	583	581	337	299	228
1976	142	141	108	124	348	30	43	31	22	68	199	149
1977	133	141	115	124	21	30	18	19	19	19	99	74
1978	49	49	49	19	21	30	18	19	19	19	99	74
1979	49	49	49	19	23	30	29	21	19	19	99	74
1980	49	1,494	471	124	1,043	1,053	605	577	575	313	299	228
1981	134	123	99	124	348	33	29	21	19	59	199	219
1982	1,214	2,851	1,625	3,253	2,384	1,191	742	715	713	494	1,240	1,520
1983	1,291	2,169	3,273	1,509	3,859	3,106	1,221	1,192	1,189	661	2,188	2,606
1984	1,412	1,005	322	124	578	727	279	252	249	255	510	228
1985	118	123	99	124	348	33	29	21	19	59	199	149
1986	133	5,172	2,261	178	1,339	840	392	365	362	317	299	228
1987	149	123	99	124	348	30	29	21	19	68	199	149
1988	134	141	115	124	21	30	18	19	19	19	99	74
1989	49	49	49	19	348	30	29	21	19	59	199	149
1990	134	142	125	124	346	30	29	21	19	72	199	149
Minimum	49	49	49	17	21	30	18	19	19	19	99	74
Maximum	3,337	5,172	3,273	3,253	3,859	3,106	1,221	1,192	1,189	661	3,290	4,044
Average	430	530	375	328	798	543	215	198	196	181	357	397

## Flow into the Delta in CFS

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1921	600	689	599	110	983	1,405	252	233	237	271	291	219
1922	110	227	100	110	2,466	2,027	364	344	349	366	291	291
1923	420	375	105	110	488	629	182	162	167	214	291	219
1924	119	115	105	110	325	0	25	16	12	58	191	140
1925	125	133	106	110	325	3	0	0	4	87	191	140
1926	125	133	105	110	325	3	0	0	4	49	191	140
1927	125	133	105	110	736	1,131	346	326	331	260	338	219
1928	127	133	990	110	325	466	19	0	4	99	291	219
1929	127	133	90	110	325	0	0	0	4	58	191	140
1930	127	133	106	110	325	0	0	0	4	49	191	140
1931	126	133	105	110	0	0	0	4	8	9	91	65
1932	42	42	40	5	325	3	0	0	4	49	191	140
1933	125	133	105	110	325	0	0	0	4	49	191	140
1934	127	133	105	110	325	0	0	0	4	58	191	140
1935	125	133	106	110	325	3	0	0	4	49	191	140
1936	125	1,406	422	389	1,293	1,008	332	312	317	298	291	219
1937	127	122	691	110	563	704	257	237	242	216	291	1,150
1938	125	1,154	1,627	2,146	2,556	1,708	441	422	426	377	291	219
1939	127	115	90	110	325	0	0	0	4	58	191	140
1940	125	133	386	110	1,338	622	175	155	160	248	291	219
1941	473	829	569	110	931	1,152	399	380	384	264	291	377
1942	1,292	973	90	110	1,915	1,530	451	432	436	340	478	351
1943	1,454	946	1,756	505	1,310	730	283	263	268	260	291	219
1944	110	115	90	110	325	3	0	0	4	49	191	140
1945	125	292	105	110	612	754	306	287	292	254	449	1,014
1946	551	139	105	110	497	599	152	132	137	223	291	219
1947	110	115	105	110	325	3	0	0	4	49	191	140
1948	109	133	105	110	325	3	0	0	4	49	191	140
1949	125	133	105	110	325	3	0	0	4	49	191	140
1950	125	138	188	110	654	816	341	322	326	261	3,281	4,034
1951	1,252	1,045	331	110	366	508	60	41	46	203	291	580
1952	1,283	1,184	970	2,799	2,731	1,353	660	641	646	390	291	219
1953	114	1,097	90	110	381	523	75	56	61	190	291	219
1954	127	115	105	110	325	3	0	0	4	94	191	140
1955	125	115	105	110	325	3	0	0	4	49	191	1,953
1956	2,961	919	172	114	1,822	1,356	451	432	437	367	291	219
1957	110	115	90	110	325	466	19	0	4	155	291	219
1958	125	1,055	899	1,655	2,228	1,412	540	521	526	365	291	219
1959	127	115	90	110	325	0	0	0	4	49	191	140
1960	127	133	105	110	325	0	0	0	4	49	191	144
1961	125	133	105	110	0	0	0	0	4	9	91	65
1962	42	42	40	5	325	0	0	0	4	49	191	140
1963	125	905	105	110	1,250	915	391	372	377	309	577	219
1964	110	115	105	110	325	3	0	0	4	49	191	2,240
1965	2,205	804	105	174	942	1,039	591	572	576	301	502	219
1966	235	115	105	110	325	3	0	0	4	49	191	140
1967	217	451	800	949	2,819	1,187	740	721	725	417	291	219
1968	110	115	90	110	325	3	0	0	4	49	191	140
1969	965	1,548	690	2,109	3,042	1,286	595	576	580	413	291	219
1970	3,330	1,020	431	110	360	501	54	34	39	168	550	700
1971	631	570	456	110	482	623	176	157	161	204	291	291
1972	125	115	90	110	325	3	0	0	4	49	191	140
1973	854	1,208	537	110	522	663	216	197	201	244	1,272	812
1974	1,304	201	847	485	935	933	485	466	471	318	291	219
1975	110	115	136	110	887	1,028	581	562	566	326	291	219
1976	135	133	99	110	325	0	25	16	12	58	191	140
1977	125	133	106	110	0	0	0	4	8	9	91	65
1978	42	42	40	5	0	0	0	4	8	9	91	65
1979	42	42	40	5	0	0	0	0	4	9	91	65
1980	42	1,486	463	110	1,020	1,023	575	556	561	302	291	219
1981	127	115	90	110	325	3	0	0	4	49	191	209
1982	1,207	2,844	1,616	3,239	2,361	1,160	713	693	698	484	1,231	1,511
1983	1,283	2,162	3,264	1,495	3,836	3,076	1,192	1,170	1,175	651	2,180	2,597
1984	1,404	997	313	110	555	697	249	230	235	245	502	219
1985	110	115	90	110	325	3	0	0	4	49	191	140
1986	125	5,165	2,252	165	1,316	810	362	343	348	307	291	219
1987	141	115	90	110	325	0	0	0	4	58	191	140
1988	127	133	106	110	0	0	0	4	8	9	91	65
1989	42	42	40	5	325	0	0	0	4	49	191	140
1990	127	135	116	110	325	0	0	0	4	62	191	140
Minimum	42	42	40	5	0	0	0	0	4	9	91	65
Maximum	3,330	5,165	3,264	3,239	3,836	3,076	1,192	1,170	1,175	651	3,281	4,034
Average	422	522	366	314	775	513	187	177	181	171	349	388

**92 229 10-9992-WSIP**  
**Composite Program III - GFS Eqn for Maint. of Camanche Hypo**  
**Fish Releases per Production Goal Faxed 1-2-92 w/Ramping**  
**Drought Planning Sequence - 1976-1977-185 TAF**

**Pardee Reservoir Storage In Acre-Feet**

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1921	170,912	141,710	130,097	108,899	197,854	209,995	196,307	190,755	189,406	192,062	193,154	182,684
1922	182,694	174,724	148,369	165,591	209,985	209,995	200,001	191,652	186,771	188,115	187,494	182,684
1923	192,683	188,180	188,857	209,995	209,985	209,995	202,505	193,708	185,956	183,423	187,779	182,684
1924	194,505	187,202	179,881	186,783	179,918	167,710	155,879	144,177	133,712	129,215	130,939	135,324
1925	142,198	203,458	209,985	209,995	209,985	209,995	190,054	167,388	147,328	130,629	140,517	152,182
1926	165,144	174,436	174,644	193,268	207,978	203,780	186,770	177,048	167,900	164,019	179,241	182,684
1927	196,609	209,960	209,985	209,995	209,985	209,995	200,602	190,350	180,149	174,149	182,071	182,684
1928	188,441	189,519	209,985	209,995	209,985	208,414	198,031	186,185	175,574	168,435	179,421	176,177
1929	169,898	165,833	167,781	183,469	187,433	185,339	178,407	176,203	175,302	176,526	182,790	182,684
1930	190,591	190,016	209,454	209,995	206,417	199,361	187,845	176,816	166,302	159,080	172,082	181,034
1931	174,873	168,694	169,608	173,377	171,415	162,924	159,400	149,006	138,209	128,580	131,058	141,980
1932	127,985	126,876	107,802	122,695	166,040	209,995	206,714	194,630	182,291	171,993	179,009	182,684
1933	183,654	166,805	170,853	202,903	209,985	209,995	196,418	192,043	186,960	186,388	188,555	182,684
1934	192,952	193,751	209,985	209,995	195,049	193,344	185,924	167,457	150,178	135,029	140,225	144,932
1935	150,322	161,287	181,353	209,995	209,985	209,995	196,297	179,534	163,839	153,317	164,577	176,891
1936	208,247	209,960	200,856	198,445	209,985	209,995	199,719	194,730	189,552	187,864	191,459	182,684
1937	182,770	209,960	209,985	207,608	209,985	209,995	194,847	189,834	184,895	184,063	185,311	182,684
1938	190,548	209,960	209,985	209,995	209,985	209,995	209,985	193,332	174,746	159,461	172,462	182,684
1939	197,453	191,519	197,446	206,624	198,949	200,229	192,569	189,916	187,851	190,557	191,115	182,684
1940	209,985	209,960	209,985	209,995	209,985	208,083	192,012	185,522	178,374	176,187	181,617	182,684
1941	194,366	209,960	206,671	202,139	209,985	209,995	200,676	195,772	192,247	192,519	193,487	182,684
1942	209,985	209,960	180,010	187,695	209,985	209,995	209,757	203,574	197,388	193,326	203,324	182,684
1943	209,985	207,582	209,985	209,995	209,985	209,995	199,363	194,595	187,956	186,673	191,034	182,684
1944	192,883	191,591	206,467	209,995	209,985	182,968	171,587	164,211	155,148	150,653	170,345	182,684
1945	184,163	209,960	209,985	196,454	209,985	209,995	189,644	182,192	176,074	174,774	177,794	182,684
1946	180,569	160,262	143,879	128,609	209,985	200,244	187,010	181,711	179,633	182,922	191,690	182,684
1947	179,744	180,857	191,245	196,451	192,888	191,609	185,571	180,198	175,496	179,573	180,480	175,008
1948	189,404	180,670	184,352	209,995	193,435	209,995	196,332	182,849	168,588	156,372	167,695	181,703
1949	187,199	179,401	190,473	201,339	209,985	200,645	191,379	185,087	179,042	175,804	183,845	182,684
1950	204,530	209,960	209,985	209,995	209,985	209,995	196,639	189,114	182,210	180,597	209,995	209,985
1951	209,985	209,960	209,985	209,995	209,985	209,995	191,301	185,277	179,650	174,805	176,999	182,684
1952	209,985	209,960	209,985	209,995	209,985	209,995	209,985	198,099	182,601	169,017	179,010	182,684
1953	209,985	199,276	209,985	209,995	209,985	209,995	207,291	199,127	192,948	193,211	198,961	182,684
1954	197,434	209,960	209,985	209,995	209,985	209,995	190,552	185,398	186,350	190,698	198,748	182,684
1955	189,416	185,629	200,044	209,012	209,985	209,995	194,217	187,770	180,869	177,239	182,252	209,985
1956	209,985	209,960	209,985	209,995	209,985	209,995	203,351	196,177	187,888	187,575	195,569	182,684
1957	195,198	209,960	209,985	207,321	209,985	209,995	191,080	176,037	163,370	160,318	176,062	182,684
1958	206,184	209,960	209,985	209,995	209,985	209,995	209,985	209,985	203,113	202,455	205,989	182,684
1959	198,817	209,960	209,985	209,995	200,532	194,707	184,467	179,531	174,358	172,782	178,321	182,684
1960	180,211	190,028	199,966	209,995	209,985	209,995	195,763	182,303	168,910	157,645	167,113	180,152
1961	180,251	173,176	171,165	176,151	163,182	158,305	153,174	147,135	141,796	136,909	140,234	142,409
1962	139,065	174,739	165,656	179,312	176,251	209,995	196,104	188,944	179,856	180,141	187,880	182,684
1963	200,697	209,960	205,639	209,995	209,985	209,995	195,890	190,308	183,891	181,496	191,177	182,684
1964	195,166	187,541	198,848	209,995	203,785	185,336	173,664	167,006	161,186	159,889	176,342	209,985
1965	209,985	209,960	195,528	209,995	209,985	209,995	194,540	191,674	207,135	209,985	209,995	182,684
1966	175,855	157,463	162,243	192,427	202,987	194,028	172,763	165,107	165,455	164,978	170,247	182,684
1967	209,985	197,978	209,985	209,995	209,985	209,995	209,985	206,509	202,592	202,014	206,142	182,684
1968	195,990	209,960	209,985	209,995	201,456	200,481	183,026	174,682	168,540	164,918	176,943	182,684
1969	209,985	209,960	209,985	209,995	209,985	209,995	209,985	209,985	208,822	209,985	207,381	182,684
1970	209,985	209,960	209,985	196,820	209,985	209,995	197,933	188,420	179,104	174,387	197,557	209,985
1971	207,929	199,731	207,694	204,771	205,290	209,995	206,493	209,985	209,995	209,985	205,702	182,684
1972	173,174	158,539	183,599	209,995	209,985	209,995	194,393	187,691	185,755	189,233	194,634	182,684
1973	209,985	209,960	207,696	206,872	209,985	209,995	198,426	190,424	185,887	188,039	207,891	209,985
1974	209,985	203,492	209,985	209,995	209,985	209,995	209,985	209,985	209,995	209,147	205,636	182,684
1975	184,920	201,623	209,985	196,515	209,985	209,995	209,039	209,985	209,995	209,985	209,995	182,684
1976	186,536	176,713	171,064	172,400	167,359	160,450	152,494	145,784	139,362	129,287	123,871	114,422
1977	104,719	88,950	77,321	78,252	83,777	87,245	90,673	93,895	91,548	89,808	81,287	64,043
1978	45,876	47,872	55,111	57,861	59,174	40,292	36,464	27,605	28,409	28,252	19,541	16,800
1979	22,504	38,090	87,426	142,217	189,117	209,995	197,846	172,454	145,120	122,067	142,933	175,497
1980	209,985	209,960	209,985	209,995	209,985	209,995	209,985	205,034	199,411	196,557	196,605	182,684
1981	207,319	209,960	209,985	209,995	207,550	200,363	185,554	173,290	164,012	162,183	181,995	209,985
1982	209,985	209,960	209,985	209,995	209,985	209,995	209,985	209,985	201,428	199,845	209,995	209,985
1983	209,985	209,960	209,985	209,995	209,985	209,995	209,985	209,985	209,995	209,985	209,995	209,985
1984	209,985	209,960	209,985	208,295	209,985	209,995	205,469	209,985	203,272	202,854	209,995	182,684
1985	165,079	168,359	202,077	209,995	200,716	195,893	178,078	173,797	172,846	177,110	187,924	182,684
1986	199,361	209,960	209,985	209,995	209,985	209,995	201,491	194,591	188,309	184,228	191,996	182,684
1987	187,443	185,161	193,400	199,563	183,446	171,257	168,739	165,826	160,411	143,911	140,296	142,509
1988	146,658	139,876	138,345	147,134	145,049	146,757	148,884	146,671	141,766	129,386	128,630	128,577
1989	116,912	110,737	156,641	200,664	209,985	209,995	195,692	178,505	164,263	141,204	159,904	178,760
1990												

## Pardee Reservoir Elevation In Feet

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1921	549	533	526	512	562	568	561	559	558	559	560	555
1922	555	551	537	546	568	568	563	559	557	558	557	555
1923	560	558	558	568	568	568	564	560	557	555	557	555
1924	561	557	554	557	554	547	541	535	528	526	527	529
1925	533	565	568	568	568	568	559	547	536	526	532	539
1926	546	551	551	560	567	565	557	552	548	546	553	555
1927	562	568	568	568	568	568	563	559	554	551	555	555
1928	558	558	568	568	568	567	562	557	551	548	553	552
1929	549	546	547	555	557	556	553	552	551	552	555	555
1930	559	559	567	568	566	563	557	552	547	543	550	554
1931	551	548	548	550	549	545	543	537	531	525	527	533
1932	525	524	511	521	547	568	566	561	555	550	553	555
1933	555	547	549	564	568	568	562	559	557	557	558	555
1934	560	560	568	568	561	560	557	547	538	529	532	535
1935	538	544	554	568	568	568	561	553	545	540	546	552
1936	567	568	564	562	568	568	563	561	558	557	559	555
1937	555	568	568	567	568	568	561	558	556	556	556	555
1938	559	568	568	568	568	568	568	560	551	543	550	555
1939	562	559	562	566	563	563	560	558	557	559	559	555
1940	568	568	568	568	568	567	559	556	553	552	554	555
1941	561	568	566	564	568	568	563	561	560	560	560	555
1942	568	568	554	557	568	568	568	565	562	560	565	555
1943	568	567	568	568	568	568	563	561	558	557	559	555
1944	560	559	566	568	568	555	549	546	541	538	549	555
1945	556	568	568	562	568	568	558	555	552	551	553	555
1946	554	543	534	525	568	563	557	555	553	555	559	555
1947	554	554	559	562	560	559	556	554	551	553	554	551
1948	558	554	556	568	560	568	561	555	548	541	547	555
1949	557	553	559	564	568	563	559	556	553	552	556	555
1950	565	568	568	568	568	568	562	558	555	554	568	568
1951	568	568	568	568	568	568	559	556	553	551	552	555
1952	568	568	568	568	568	568	568	562	555	548	553	555
1953	568	563	568	568	568	568	566	563	560	560	563	555
1954	562	568	568	568	568	568	559	556	557	559	563	555
1955	558	556	563	567	568	568	560	557	554	552	555	568
1956	568	568	568	568	568	568	565	561	558	557	561	555
1957	561	568	568	566	568	568	559	552	545	544	552	555
1958	566	568	568	568	568	568	568	568	565	564	566	555
1959	563	568	568	568	563	561	556	553	551	550	553	555
1960	554	559	563	568	568	568	568	561	555	548	542	554
1961	554	550	549	552	545	542	540	536	533	530	532	534
1962	532	551	546	553	552	568	561	558	554	554	557	555
1963	563	568	566	568	568	568	568	561	559	556	559	555
1964	561	557	563	568	565	556	550	547	544	543	552	568
1965	568	568	561	568	568	568	561	559	566	568	568	555
1966	552	542	545	560	565	560	550	546	546	546	549	555
1967	568	562	568	568	568	568	568	566	564	564	566	555
1968	561	568	568	568	564	563	555	551	548	546	552	555
1969	568	568	568	568	568	568	568	568	567	568	567	555
1970	568	568	568	562	568	568	562	558	553	551	562	568
1971	567	563	567	565	566	568	566	568	568	568	566	555
1972	550	543	555	568	568	568	561	557	556	558	561	555
1973	568	568	567	566	568	568	562	559	557	558	567	568
1974	568	565	568	568	568	568	568	568	568	567	566	555
1975	556	564	568	562	568	568	567	568	568	568	568	555
1976	557	552	549	550	547	544	539	535	532	526	522	516
1977	509	497	488	488	493	496	499	501	499	498	491	475
1978	454	456	465	468	469	446	440	423	425	424	404	397
1979	412	442	496	533	558	568	562	550	535	521	534	551
1980	568	568	568	568	568	568	568	565	563	562	562	555
1981	566	568	568	568	567	563	556	550	545	545	555	568
1982	568	568	568	568	568	568	568	568	564	563	568	568
1983	568	568	568	568	568	568	568	568	568	568	568	568
1984	568	568	568	567	568	568	566	568	565	564	568	555
1985	546	548	564	568	564	561	553	551	550	552	558	555
1986	563	568	568	568	568	568	564	561	558	556	559	555
1987	557	556	560	563	555	549	548	546	544	534	532	534
1988	536	532	531	536	535	536	537	536	533	526	525	525
1989	518	514	542	563	568	568	561	553	546	533	543	553
1990	559	558	565	568	566	550	546	541	535	531	527	524
Minimum	412	442	465	468	469	446	440	423	425	424	404	397
Maximum	568	568	568	568	568	568	568	568	568	568	568	568
Average	554	555	557	559	562	561	557	553	550	547	550	550

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92 229 10-9992-WSIP  
 Composite Program III - GFS Eqn for Maint. of Camanche Hypo  
 Fish Releases per Production Goal Faxed 1-2-92 w/Ramping  
 Drought Planning Sequence - 1976-1977-185 TAF

Total Pardee Releases in CFS

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1921	1,100	1,097	1,080	1,064	1,092	2,367	358	196	142	137	141	416
1922	297	679	1,005	435	1,914	4,247	513	258	190	184	259	779
1923	422	503	330	512	1,604	1,383	386	251	260	251	97	276
1924	0	0	0	0	162	167	162	162	167	162	0	0
1925	0	0	549	970	2,491	1,694	459	459	474	459	0	0
1926	0	0	0	0	252	260	367	252	260	252	81	231
1927	169	829	634	990	1,989	2,662	394	283	293	283	82	240
1928	154	65	863	1,009	2,327	301	294	292	301	292	0	0
1929	18	0	0	0	202	208	325	231	208	202	37	102
1930	0	0	0	338	439	1,100	392	392	405	392	51	0
1931	0	0	0	0	189	196	189	200	196	189	0	0
1932	406	592	928	475	491	1,996	399	334	345	334	46	130
1933	0	65	0	0	472	540	503	309	319	309	230	532
1934	162	12	75	1	259	268	259	259	268	259	0	0
1935	0	119	0	1,013	1,286	2,070	374	374	386	374	0	0
1936	0	2,098	1,100	1,100	2,509	1,963	403	230	237	230	130	383
1937	62	187	1,050	1,100	1,680	1,467	439	228	220	212	176	521
1938	243	926	2,079	1,573	4,755	3,968	601	463	480	465	31	86
1939	19	6	0	61	225	233	315	227	233	225	23	53
1940	90	1,154	1,462	1,157	3,144	1,100	417	249	257	249	129	388
1941	332	568	1,100	1,100	1,677	2,286	460	237	210	204	200	594
1942	648	969	1,100	1,002	2,314	3,519	568	280	273	264	269	788
1943	760	960	2,089	2,086	2,820	1,441	432	265	274	265	133	383
1944	0	0	127	115	499	880	336	252	260	252	48	142
1945	296	771	686	970	1,400	2,035	531	266	238	230	252	757
1946	740	787	970	1,080	1,229	1,100	379	205	166	160	150	434
1947	287	174	0	360	245	190	208	184	190	184	0	0
1948	0	0	0	212	1,100	2,151	382	377	390	377	0	0
1949	90	0	83	638	972	968	336	228	236	228	64	180
1950	0	652	750	1,193	1,525	2,062	412	265	274	265	2,109	4,067
1951	1,242	1,096	1,113	1,683	2,023	538	510	257	253	245	225	676
1952	838	1,265	1,344	1,807	4,331	3,984	1,075	473	489	473	104	312
1953	347	529	377	966	829	1,691	496	303	313	303	169	488
1954	0	29	578	879	1,027	280	398	212	174	168	161	473
1955	79	121	0	0	362	462	359	226	233	226	88	1,947
1956	2,693	1,297	1,186	1,281	2,719	2,875	499	279	288	279	189	549
1957	0	36	492	396	1,071	1,740	413	319	330	319	71	210
1958	48	1,067	1,291	2,207	2,864	3,184	561	290	288	279	186	532
1959	0	243	292	121	255	264	335	255	264	255	102	135
1960	0	0	0	88	629	577	401	401	415	401	49	0
1961	31	0	0	0	332	343	332	332	343	332	0	0
1962	0	0	640	958	843	1,289	500	364	376	364	188	395
1963	87	940	481	1,398	3,088	1,915	468	285	294	285	157	452
1964	207	335	0	65	245	447	340	245	253	245	55	2,500
1965	2,281	1,126	1,100	1,302	1,790	2,286	737	348	254	485	601	857
1966	412	330	239	0	170	175	443	230	175	170	200	604
1967	422	763	1,103	1,601	2,233	3,779	1,648	275	284	275	232	675
1968	77	131	390	271	213	220	343	213	220	213	84	251
1969	1,950	1,602	1,238	2,218	4,184	3,271	721	372	375	391	318	939
1970	1,915	1,096	1,286	999	1,252	1,586	491	293	302	293	174	714
1971	743	805	817	917	662	1,656	583	389	268	339	238	705
1972	374	341	151	21	230	767	430	225	177	171	192	561
1973	539	1,139	1,016	954	1,777	1,287	502	254	231	224	232	905
1974	1,159	825	1,509	1,603	1,867	1,933	568	476	319	218	179	513
1975	30	0	810	1,100	1,135	2,559	667	454	459	369	302	679
1976	19	0	0	0	85	88	85	85	88	85	0	0
1977	0	0	0	0	0	0	0	0	116	0	108	147
1978	117	108	135	177	250	314	288	253	187	104	156	146
1979	82	15	101	174	537	782	537	537	555	537	47	0
1980	1,896	2,346	1,526	1,127	1,759	2,437	837	239	247	239	163	470
1981	0	158	306	434	227	235	355	227	235	227	87	566
1982	1,489	2,642	2,318	3,838	4,261	2,624	835	460	448	434	892	1,659
1983	1,692	2,380	3,789	2,061	3,021	5,824	2,953	699	541	534	1,637	2,638
1984	1,470	1,205	1,237	1,026	1,923	1,411	582	302	278	269	311	776
1985	313	164	0	548	270	162	352	194	162	157	128	372
1986	254	4,354	2,879	1,762	2,745	1,804	436	302	312	302	111	315
1987	0	0	0	0	236	243	236	236	243	236	0	0
1988	7	0	0	0	192	199	192	192	199	192	0	0
1989	71	0	0	392	1,310	904	514	514	531	514	55	0
1990	54	106	0	101	372	872	372	372	384	372	0	0
Minimum	0	0	0	0	0	0	0	0	88	0	0	0
Maximum	2,693	4,354	3,789	3,838	4,755	5,824	2,953	699	555	537	2,109	4,067
Average	418	597	683	786	1,351	1,455	486	294	287	277	185	495

## Camanche Reservoir Storage in Acre-Feet

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1921	338,353	360,536	386,101	430,879	409,141	430,879	395,665	357,170	326,204	305,205	291,241	301,016
1922	309,337	336,506	388,520	396,100	334,188	430,879	398,350	356,793	321,941	298,179	292,769	320,552
1923	318,571	323,050	331,753	346,553	385,979	394,835	366,326	336,172	317,384	306,850	290,009	288,386
1924	275,977	264,838	252,360	234,318	206,628	195,258	184,404	175,901	172,622	172,445	156,721	144,866
1925	134,864	128,514	152,136	193,653	304,145	347,312	339,344	337,805	346,421	357,479	335,350	316,802
1926	305,208	296,539	283,539	266,789	242,688	233,054	227,005	217,106	215,723	219,067	211,004	211,294
1927	211,680	253,828	280,789	323,015	371,452	430,879	392,036	353,081	325,452	315,160	295,250	291,985
1928	289,219	283,726	273,355	316,960	416,292	376,047	357,781	345,872	344,129	344,390	323,685	305,859
1929	295,967	285,636	273,478	256,243	230,937	222,658	219,241	213,427	211,802	213,176	198,834	191,806
1930	181,604	171,536	160,865	163,634	151,773	192,615	188,473	187,576	195,039	206,580	193,882	179,483
1931	168,083	157,305	144,915	167,407	122,415	113,824	105,560	100,481	99,610	104,058	94,671	89,474
1932	108,534	141,063	189,419	206,396	197,819	291,457	286,829	281,420	284,623	291,976	278,221	272,718
1933	262,638	255,030	242,785	224,727	214,763	221,935	224,284	217,899	220,056	226,939	224,047	247,507
1934	246,401	240,362	231,933	213,768	192,718	187,556	180,521	176,852	175,242	184,662	169,639	156,297
1935	145,843	141,382	130,146	176,766	216,438	314,335	307,986	304,871	310,398	320,708	304,452	290,918
1936	283,916	301,269	330,508	381,895	399,000	430,879	392,955	347,987	312,285	295,765	285,714	295,652
1937	291,294	300,652	327,194	375,326	414,459	423,943	393,885	357,541	331,207	318,208	307,421	263,759
1938	265,519	258,403	284,322	231,453	335,152	430,879	395,452	358,566	333,663	324,843	301,986	285,909
1939	275,261	264,949	253,422	238,979	215,975	208,427	204,577	198,669	198,445	202,124	187,183	176,513
1940	175,139	236,467	297,290	348,566	430,893	422,882	396,341	366,068	346,603	334,042	319,326	327,713
1941	316,889	301,269	330,508	381,895	399,000	430,879	392,955	347,987	312,285	295,765	285,714	295,652
1942	257,378	254,364	309,828	352,414	349,140	430,879	395,120	348,415	312,337	293,993	277,011	297,642
1943	255,389	252,763	273,355	351,129	413,952	418,795	385,385	348,443	322,725	309,629	294,358	298,490
1944	286,830	280,063	276,915	266,757	258,061	285,120	276,712	266,376	264,777	267,911	257,415	233,074
1945	258,492	290,297	322,427	362,213	381,400	422,416	395,027	357,922	329,740	316,524	300,552	281,665
1946	287,819	320,039	368,041	413,870	430,893	424,238	396,783	365,210	341,815	325,318	313,358	321,411
1947	326,393	325,155	313,480	316,823	291,979	278,044	261,805	247,440	241,688	241,462	225,582	211,681
1948	199,131	188,392	177,284	174,171	203,575	306,331	300,561	297,718	303,502	313,859	297,231	284,384
1949	277,736	267,311	264,788	284,487	304,859	336,790	327,975	315,833	312,346	313,090	300,891	298,036
1950	287,012	301,269	327,194	374,040	395,294	430,879	390,591	348,159	317,662	304,732	231,453	231,453
1951	231,453	231,453	273,355	351,129	423,928	389,613	376,226	353,800	341,152	331,445	324,198	328,570
1952	301,269	301,269	319,236	240,437	306,213	422,935	401,920	350,896	313,086	302,325	283,589	282,782
1953	293,861	257,693	268,134	308,712	307,449	341,896	327,191	307,147	297,522	292,118	280,373	291,779
1954	279,926	270,786	295,485	330,346	352,820	342,941	336,666	322,695	315,069	308,558	302,507	320,433
1955	319,391	315,724	302,566	285,991	268,614	270,806	263,888	252,063	248,784	249,793	239,190	244,416
1956	231,453	247,430	300,244	352,094	378,019	430,879	389,957	342,367	306,674	287,746	274,957	288,658
1957	277,294	268,986	290,280	296,515	318,156	361,657	348,574	336,218	334,153	330,980	312,816	307,859
1958	299,502	301,269	327,194	354,084	363,067	430,879	388,122	335,635	294,492	274,856	261,991	273,933
1959	263,268	269,885	274,967	264,459	240,449	231,080	223,055	213,387	213,183	216,043	205,569	199,827
1960	188,384	179,067	168,384	156,483	156,129	166,046	162,800	162,732	170,994	183,164	171,027	156,965
1961	146,894	135,983	123,912	106,746	110,648	110,864	109,203	110,824	118,100	131,017	121,295	112,206
1962	105,064	105,745	138,010	183,817	196,388	248,137	250,143	246,914	252,213	263,864	258,758	270,102
1963	263,203	233,443	252,507	322,094	406,958	430,879	393,846	352,240	322,062	308,777	280,175	288,671
1964	291,625	298,573	285,949	271,833	247,812	249,695	241,812	231,356	229,566	232,996	220,571	240,437
1965	244,958	257,559	312,028	363,248	385,615	422,608	389,106	339,018	294,057	291,985	293,130	328,390
1966	335,399	344,181	345,695	327,568	298,106	283,177	281,431	269,800	263,070	260,502	257,872	284,577
1967	301,088	313,071	326,109	354,867	288,669	405,540	417,820	352,436	299,501	277,045	268,465	290,105
1968	285,516	283,532	297,765	295,685	269,091	256,994	249,288	237,017	233,152	233,930	224,425	228,183
1969	294,035	301,088	326,109	314,413	352,094	430,879	392,714	340,191	299,448	283,604	278,497	316,024
1970	231,212	231,212	280,107	321,661	346,781	375,314	360,871	340,768	331,196	325,954	301,227	301,088
1971	303,145	311,318	328,399	364,910	346,892	372,650	356,792	335,545	317,178	312,483	305,187	328,390
1972	337,899	346,617	342,547	326,274	300,464	320,702	317,798	305,550	299,407	296,979	294,136	315,503
1973	301,088	301,088	328,397	367,087	414,610	415,590	391,980	359,698	336,517	324,240	258,818	263,467
1974	252,977	283,501	319,296	371,387	399,402	423,602	388,308	353,005	318,848	300,540	289,214	302,186
1975	291,539	284,421	326,109	374,457	360,319	415,479	379,776	338,252	306,990	298,074	293,771	316,183
1976	304,266	293,189	280,444	262,735	230,276	214,075	198,316	185,406	177,453	171,801	155,825	141,581
1977	129,185	117,972	105,489	87,923	71,802	52,247	33,788	17,771	13,387	6,982	4,000	4,000
1978	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000
1979	4,000	4,000	4,000	4,000	19,572	43,516	50,625	60,625	78,268	102,265	95,981	88,040
1980	203,951	248,696	308,806	355,651	372,653	420,599	395,934	340,521	296,828	279,970	267,129	277,417
1981	268,660	266,388	276,625	284,821	259,125	247,936	240,977	229,452	226,537	228,672	220,366	231,152
1982	245,863	231,152	270,642	292,045	374,401	419,114	378,693	322,352	279,080	261,369	236,759	243,150
1983	270,401	281,072	317,487	331,475	247,310	369,638	429,844	358,428	290,624	267,025	231,152	231,152
1984	231,152	240,075	290,357	333,554	388,248	394,868	374,301	343,077	320,710	310,390	297,350	327,348
1985	333,998	332,223	322,540	336,711	313,161	297,446	289,930	275,987	268,741	265,906	260,510	271,218
1986	274,456	236,156	272,873	351,129	407,259	426,735	386,395	344,671	316,533	301,161	283,103	281,060
1987	269,081	259,495	249,589	231,315	208,230	201,382	192,746	187,487	188,133	192,120	176,275	163,729
1988	153,465	142,016	129,227	112,422	107,688	99,396	91,650	86,214	85,701	90,280	81,503	73,764
1989	71,074	65,119	60,041	73,413	115,451	145,056	148,947	155,960	172,069	192,121	180,213	165,840</td

92 229 10-9992-WSIP  
 Composite Program III - GFS Eqn for Maint. of Camanche Hypo  
 Fish Releases per Production Goal Faxed 1-2-92 w/Ramping  
 Drought Planning Sequence - 1976-1977-185 TAF

Camanche Reservoir Elevation in Feet

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1921	223	226	229	235	233	235	231	225	221	218	215	217
1922	218	222	230	231	222	235	231	225	220	216	216	220
1923	220	220	222	224	229	231	227	222	219	218	215	215
1924	213	211	209	206	201	198	196	194	194	193	190	187
1925	185	183	189	198	217	224	223	223	224	225	222	219
1926	218	216	214	211	207	205	204	203	202	203	201	201
1927	202	209	214	220	227	235	230	225	221	219	216	215
1928	215	214	212	219	234	228	225	224	223	224	220	218
1929	216	214	213	210	205	204	203	202	202	202	199	198
1930	195	193	191	192	189	198	197	197	198	201	198	195
1931	193	190	187	183	182	180	177	176	175	177	174	172
1932	178	187	197	201	199	215	215	214	214	215	213	212
1933	211	209	207	204	202	203	204	203	203	204	204	208
1934	208	207	205	202	198	197	195	194	195	196	193	190
1935	188	187	184	194	202	219	218	218	218	220	217	215
1936	214	217	222	226	233	235	230	225	220	218	215	216
1937	215	217	221	228	233	235	231	225	222	220	218	211
1938	211	210	214	205	222	235	231	226	222	221	217	215
1939	213	211	209	207	202	201	200	199	199	200	197	194
1940	194	206	216	224	235	234	231	227	224	222	220	221
1941	219	217	221	229	231	235	230	224	219	216	214	216
1942	210	209	218	225	224	235	231	224	219	216	213	216
1943	209	209	212	225	233	234	229	224	220	218	216	217
1944	215	214	213	211	210	214	213	211	211	212	210	209
1945	210	215	220	226	229	234	231	226	221	219	217	214
1946	215	220	227	233	235	235	231	227	223	221	219	220
1947	221	221	219	219	215	213	210	208	207	207	204	202
1948	199	197	195	194	200	218	217	216	217	219	216	214
1949	213	211	211	214	218	222	221	219	219	219	217	216
1950	215	217	221	228	231	235	230	224	220	218	205	205
1951	205	205	212	225	235	230	228	225	223	222	221	221
1952	217	217	220	207	218	234	232	224	219	217	214	214
1953	216	210	212	218	218	223	221	218	216	216	214	215
1954	214	212	216	221	225	223	222	220	219	218	217	220
1955	220	219	217	215	212	212	211	209	208	208	207	207
1956	205	208	217	225	228	235	230	223	218	215	213	215
1957	213	212	215	216	220	226	224	222	222	222	219	218
1958	217	217	221	225	226	235	230	222	216	213	211	213
1959	211	212	213	211	207	205	204	202	202	202	200	199
1960	197	195	193	190	190	192	191	191	193	196	193	190
1961	188	185	182	178	179	179	178	179	181	184	182	179
1962	177	177	186	196	199	208	208	208	209	211	210	212
1963	211	206	209	220	232	235	231	225	220	218	214	215
1964	215	217	215	212	208	208	207	205	205	205	203	207
1965	208	210	219	226	229	234	230	223	216	215	216	221
1966	222	224	224	221	216	214	214	212	211	210	210	214
1967	217	219	221	225	215	232	234	225	217	213	212	215
1968	214	214	216	216	212	210	208	206	205	206	204	205
1969	216	217	221	219	225	235	230	223	217	214	213	219
1970	205	205	214	220	224	228	226	223	222	221	217	217
1971	217	219	221	227	224	228	225	222	219	219	218	221
1972	223	224	223	221	217	220	220	218	217	216	216	219
1973	217	217	221	227	233	233	230	226	222	221	210	211
1974	209	214	220	227	231	235	230	225	220	217	215	217
1975	215	214	221	228	226	233	229	223	218	216	216	219
1976	217	216	214	211	205	202	199	196	195	193	190	187
1977	184	181	177	172	166	158	147	134	130	123	119	119
1978	119	119	119	119	119	119	119	119	119	119	119	119
1979	119	119	119	119	136	153	157	162	168	176	174	172
1980	200	208	218	225	228	234	231	223	216	214	211	213
1981	212	211	213	214	210	208	207	205	204	205	203	205
1982	208	205	212	215	228	234	228	220	213	210	206	207
1983	212	214	219	222	208	227	235	226	215	211	205	205
1984	205	207	215	222	230	231	228	223	220	218	216	221
1985	222	222	220	222	219	216	215	213	212	211	210	212
1986	213	206	212	225	232	235	230	224	219	217	214	214
1987	212	210	208	205	201	200	198	197	197	198	194	192
1988	189	187	184	179	178	175	173	171	171	172	170	167
1989	166	163	161	167	180	187	188	190	193	198	195	192
1990	190	189	187	184	181	188	188	189	191	194	190	187
Minimum	119	119	119	119	119	119	119	119	119	119	119	119
Maximum	223	226	230	235	235	235	235	227	224	225	222	221
Average	206	206	208	211	212	216	214	211	208	208	205	206

## Total Camanche Releases in CFS

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1921	691	773	710	287	1,398	1,935	844	742	605	446	356	300
1922	201	293	200	278	2,876	2,557	956	854	717	540	356	388
1923	511	459	200	278	915	1,169	766	664	528	389	356	300
1924	201	200	199	280	572	312	281	247	182	150	256	220
1925	200	200	201	278	658	912	509	408	271	247	356	300
1926	201	200	200	278	603	371	402	352	237	178	256	220
1927	200	200	200	278	1,152	1,600	939	837	700	430	420	300
1928	201	200	1,101	278	658	912	509	408	271	247	356	300
1929	201	200	199	280	572	312	318	266	190	150	256	220
1930	200	200	201	278	603	371	402	352	237	178	256	220
1931	200	200	199	280	246	309	281	247	182	100	156	145
1932	116	108	135	173	603	371	402	352	237	178	256	220
1933	200	200	200	278	603	371	402	352	237	178	256	220
1934	200	200	199	280	572	312	318	266	190	150	256	220
1935	200	200	201	278	603	371	402	352	237	178	256	220
1936	200	2,146	533	641	1,708	1,538	924	822	685	473	356	300
1937	201	200	792	278	990	1,244	841	739	602	391	356	1,247
1938	243	1,277	1,785	2,449	3,025	2,294	1,090	984	840	585	393	343
1939	201	200	199	280	572	312	318	266	190	150	256	220
1940	200	200	537	278	1,753	1,165	762	660	523	423	356	300
1941	564	913	680	288	1,346	1,682	991	889	752	439	356	474
1942	1,398	1,071	216	296	2,334	2,080	1,063	960	821	526	573	463
1943	1,560	1,043	1,883	774	1,744	1,292	890	787	647	447	369	314
1944	201	200	200	278	603	371	402	352	237	178	256	220
1945	200	326	200	278	1,039	1,293	891	789	652	429	531	1,111
1946	642	224	200	278	912	1,142	739	637	501	398	356	300
1947	201	200	200	278	603	371	402	352	237	178	256	220
1948	200	200	200	278	603	371	402	352	237	178	256	220
1949	200	200	200	278	603	371	402	352	237	178	256	220
1950	238	466	339	387	1,130	1,396	981	876	732	466	3,394	4,168
1951	1,343	1,129	442	354	794	1,047	645	543	406	378	356	677
1952	1,432	1,321	1,145	3,119	3,219	1,960	1,330	1,223	1,076	610	406	359
1953	204	1,164	200	278	806	1,060	657	555	418	364	356	300
1954	201	200	200	278	615	388	421	364	244	236	256	220
1955	200	200	200	278	603	371	402	352	237	178	256	2,035
1956	3,079	1,027	312	396	2,269	1,920	1,078	974	832	562	378	326
1957	201	200	200	278	694	948	546	444	307	341	356	300
1958	228	1,165	1,041	1,940	2,678	1,979	1,170	1,065	924	562	380	328
1959	201	200	200	278	603	371	402	352	237	178	256	220
1960	200	200	200	278	603	371	402	352	237	178	256	220
1961	200	200	199	280	246	309	318	266	190	100	156	145
1962	116	108	135	173	603	371	402	352	237	178	256	220
1963	200	1,548	200	278	1,665	1,445	983	881	744	483	659	300
1964	201	200	200	278	603	371	402	352	237	178	256	2,405
1965	2,309	900	213	440	1,372	1,598	1,195	1,093	953	486	595	316
1966	325	200	200	278	603	371	402	352	237	178	256	220
1967	319	559	940	1,231	3,267	1,764	1,362	1,258	1,117	612	378	326
1968	201	200	200	278	603	371	402	352	237	178	256	220
1969	1,062	1,678	857	2,421	3,521	1,883	1,255	1,148	1,003	628	399	351
1970	3,427	1,109	548	284	794	1,048	645	543	405	347	637	803
1971	722	655	567	278	909	1,163	760	658	522	379	356	388
1972	216	200	200	278	603	371	402	352	237	178	256	220
1973	914	1,293	648	278	949	1,203	800	699	562	419	1,354	909
1974	1,395	285	958	737	1,350	1,475	1,073	971	834	492	356	300
1975	201	200	203	278	1,314	1,568	1,165	1,063	927	501	356	300
1976	201	200	199	280	572	312	281	247	182	150	256	220
1977	200	200	200	280	246	309	281	247	182	100	156	145
1978	116	108	134	175	246	309	281	247	182	100	156	145
1979	116	108	135	173	278	368	402	352	237	138	156	145
1980	116	1,669	573	324	1,435	1,565	1,163	1,061	924	478	356	300
1981	201	200	200	278	603	371	402	352	237	178	256	420
1982	1,379	3,001	1,817	3,587	2,877	1,809	1,408	1,299	1,149	722	1,382	1,690
1983	1,456	2,319	3,464	1,843	4,352	3,712	1,889	1,780	1,630	891	2,331	2,776
1984	1,495	1,081	424	278	983	1,237	834	732	595	420	584	300
1985	201	200	200	278	603	371	402	352	237	178	256	220
1986	242	5,238	2,410	466	1,783	1,408	1,007	901	757	515	392	342
1987	201	200	199	280	572	312	318	266	190	150	256	220
1988	200	200	200	280	246	309	281	247	182	100	156	145
1989	116	108	135	173	603	371	402	352	237	178	256	220
1990	200	200	199	280	572	312	318	266	190	150	256	220
Minimum	116	108	134	173	246	309	281	247	182	100	156	145
Maximum	3,427	5,238	3,464	3,587	4,352	3,712	1,889	1,780	1,630	891	3,394	4,168
Average	510	627	477	509	1,127	970	673	597	477	322	424	483

## Flow at Victor (Brueck Rd) CFS

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1921	670	754	682	241	1,273	1,770	671	621	529	403	337	274
1922	180	274	172	231	2,751	2,392	783	732	641	497	337	363
1923	490	441	172	231	790	1,003	594	543	451	346	337	274
1924	180	181	171	233	502	224	221	196	147	126	237	195
1925	178	181	173	231	533	747	337	286	195	204	337	274
1926	180	181	172	231	533	283	317	286	195	154	237	195
1927	178	181	172	231	1,027	1,435	766	716	624	387	401	274
1928	180	181	1,073	231	533	747	337	286	195	204	337	274
1929	180	181	171	233	502	224	233	200	147	126	237	195
1930	178	181	173	231	533	283	317	286	195	154	237	195
1931	178	181	171	233	177	220	221	196	147	77	137	120
1932	95	89	107	126	533	283	317	286	195	154	237	195
1933	178	181	172	231	533	283	317	286	195	154	237	195
1934	178	181	171	233	502	224	233	200	147	126	237	195
1935	178	181	173	231	533	283	317	286	195	154	237	195
1936	178	2,127	505	594	1,583	1,373	751	700	609	430	337	274
1937	180	181	764	231	865	1,078	668	618	526	349	337	1,222
1938	209	1,247	1,743	2,387	2,884	2,112	900	847	750	532	362	305
1939	180	181	171	233	502	224	233	200	147	126	237	195
1940	178	181	509	231	1,628	999	589	539	447	380	337	274
1941	543	895	652	242	1,221	1,517	818	768	676	396	337	449
1942	1,372	1,048	183	244	2,203	1,908	884	833	740	479	550	433
1943	1,535	1,021	1,850	722	1,613	1,121	711	660	566	401	346	285
1944	180	181	172	231	533	283	317	286	195	154	237	195
1945	178	308	172	231	914	1,128	718	667	576	386	512	1,086
1946	621	205	172	231	787	976	567	516	424	355	337	274
1947	180	181	172	231	533	283	317	286	195	154	237	195
1948	178	181	172	231	533	283	317	286	195	154	237	195
1949	178	181	172	231	533	283	317	286	195	154	237	195
1950	205	437	298	327	990	1,216	793	740	644	414	3,365	4,131
1951	1,321	1,111	414	307	668	882	472	422	330	335	337	652
1952	1,394	1,286	1,098	3,052	3,072	1,771	1,134	1,080	981	554	372	316
1953	183	1,145	172	231	681	894	484	434	342	321	337	274
1954	180	181	172	231	533	283	317	286	195	208	237	195
1955	178	181	172	231	533	283	317	286	195	154	237	2,009
1956	3,050	1,001	275	340	2,134	1,744	895	843	748	513	352	293
1957	180	181	172	231	569	783	373	322	231	298	337	274
1958	198	1,138	1,004	1,884	2,542	1,802	986	934	839	513	354	294
1959	180	181	172	231	533	283	317	286	195	154	237	195
1960	178	181	172	231	533	283	317	286	195	154	237	195
1961	178	181	171	233	177	220	233	200	147	77	137	120
1962	95	89	107	126	533	283	317	286	195	154	237	195
1963	178	1,530	172	231	1,540	1,280	810	760	668	441	640	274
1964	180	181	172	231	533	283	317	286	195	154	237	2,380
1965	2,284	678	181	390	1,242	1,427	1,018	966	873	440	572	287
1966	304	181	172	231	533	283	317	286	195	154	237	195
1967	290	533	903	1,176	3,132	1,589	1,179	1,127	1,032	563	352	293
1968	180	181	172	231	533	283	317	286	195	154	237	195
1969	1,025	1,646	812	2,357	3,376	1,697	1,062	1,008	911	573	367	310
1970	3,404	1,089	518	236	667	880	470	420	327	303	616	776
1971	701	636	539	231	784	997	588	537	445	336	337	363
1972	195	181	172	231	533	283	317	286	195	154	237	195
1973	893	1,274	620	231	824	1,038	628	577	486	376	1,335	884
1974	1,374	266	930	690	1,224	1,310	900	850	758	449	337	274
1975	180	181	175	231	1,189	1,403	993	942	850	458	337	274
1976	180	181	171	233	502	224	221	196	147	126	237	195
1977	178	181	172	233	177	220	221	196	147	77	137	120
1978	95	89	106	128	177	220	221	196	147	77	137	120
1979	95	89	107	126	208	280	317	286	195	114	137	120
1980	95	1,651	545	278	1,310	1,400	990	940	848	435	337	274
1981	180	181	172	231	533	283	317	286	195	154	237	394
1982	1,334	2,960	1,762	3,511	2,721	1,612	1,203	1,148	1,046	660	1,342	1,640
1983	1,411	2,279	3,409	1,767	4,196	3,515	1,684	1,629	1,527	829	2,291	2,726
1984	1,474	1,063	396	231	858	1,071	661	611	519	377	565	274
1985	180	181	172	231	533	283	317	286	195	154	237	195
1986	208	5,208	2,368	405	1,643	1,226	817	764	667	462	362	304
1987	180	181	171	233	502	224	233	200	147	126	237	195
1988	178	181	172	233	177	220	221	196	147	77	137	120
1989	95	89	107	126	533	283	317	286	195	154	237	195
1990	178	181	171	233	502	224	233	200	147	126	237	195
Minimum	95	89	106	126	177	220	221	196	147	77	137	120
Maximum	3,404	5,208	3,409	3,511	4,196	3,515	1,684	1,629	1,527	829	3,365	4,131
Average	487	606	447	460	1,025	839	542	501	415	287	403	456

## Flow at Victor (Bruella Rd) CFS

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1921	670	754	682	241	1,273	1,770	671	621	529	403	337	274
1922	180	274	172	231	2,751	2,392	783	732	641	497	337	363
1923	490	441	172	231	790	1,003	594	543	451	346	337	274
1924	180	181	171	233	502	224	221	196	147	126	237	195
1925	178	181	173	231	533	747	337	286	195	204	337	274
1926	180	181	172	231	533	283	317	286	195	154	237	195
1927	178	181	172	231	1,027	1,435	766	716	624	387	401	274
1928	180	181	1,073	231	533	747	337	286	195	204	337	274
1929	180	181	171	233	502	224	233	200	147	126	237	195
1930	178	181	173	231	533	283	317	286	195	154	237	195
1931	178	181	171	233	177	220	221	196	147	77	137	120
1932	95	89	107	126	533	283	317	286	195	154	237	195
1933	178	181	172	231	533	283	317	286	195	154	237	195
1934	178	181	171	233	502	224	233	200	147	126	237	195
1935	178	181	173	231	533	283	317	286	195	154	237	195
1936	178	2,127	505	594	1,583	1,373	751	700	609	430	337	274
1937	180	181	764	231	865	1,078	668	618	526	349	337	1,222
1938	209	1,247	1,743	2,387	2,884	2,112	900	847	750	532	362	305
1939	180	181	171	233	502	224	233	200	147	126	237	195
1940	178	181	509	231	1,628	999	589	539	447	380	337	274
1941	543	895	652	242	1,221	1,517	818	768	676	396	337	449
1942	1,372	1,048	183	244	2,203	1,908	884	833	740	479	550	433
1943	1,535	1,021	1,850	722	1,613	1,121	711	660	566	401	346	285
1944	180	181	172	231	533	283	317	286	195	154	237	195
1945	178	308	172	231	914	1,128	718	667	576	386	512	1,086
1946	621	205	172	231	787	976	567	516	424	355	337	274
1947	180	181	172	231	533	283	317	286	195	154	237	195
1948	178	181	172	231	533	283	317	286	195	154	237	195
1949	178	181	172	231	533	283	317	286	195	154	237	195
1950	205	437	298	327	990	1,216	793	740	644	414	3,365	4,131
1951	1,321	1,111	414	307	668	882	472	422	330	335	337	652
1952	1,394	1,286	1,098	3,052	3,072	1,771	1,134	1,080	981	554	372	316
1953	183	1,145	172	231	681	894	484	434	342	321	337	274
1954	180	181	172	231	533	283	317	286	195	208	237	195
1955	178	181	172	231	533	283	317	286	195	154	237	2,009
1956	3,050	1,001	275	340	2,134	1,744	895	843	748	513	352	293
1957	180	181	172	231	569	783	373	322	231	298	337	274
1958	198	1,138	1,004	1,884	2,542	1,802	986	934	839	513	354	294
1959	180	181	172	231	533	283	317	286	195	154	237	195
1960	178	181	172	231	533	283	317	286	195	154	237	195
1961	178	181	171	233	177	220	233	200	147	77	137	120
1962	95	89	107	126	533	283	317	286	195	154	237	195
1963	178	1,530	172	231	1,540	1,280	810	760	668	441	640	274
1964	180	181	172	231	533	283	317	286	195	154	237	2,380
1965	2,284	878	181	390	1,242	1,427	1,018	966	873	440	572	287
1966	304	181	172	231	533	283	317	286	195	154	237	195
1967	290	533	903	1,176	3,132	1,589	1,179	1,127	1,032	563	352	293
1968	180	181	172	231	533	283	317	286	195	154	237	195
1969	1,025	1,646	812	2,357	3,376	1,697	1,062	1,008	911	573	367	310
1970	3,404	1,089	518	236	667	880	470	420	327	303	616	776
1971	701	636	539	231	784	997	588	537	445	336	337	363
1972	195	181	172	231	533	283	317	286	195	154	237	195
1973	893	1,274	620	231	824	1,038	628	577	486	376	1,335	884
1974	1,374	266	930	690	1,224	1,310	900	850	758	449	337	274
1975	180	181	175	231	1,189	1,403	993	942	850	458	337	274
1976	180	181	171	233	502	224	221	196	147	126	237	195
1977	178	181	172	233	177	220	221	196	147	77	137	120
1978	95	89	106	128	177	220	221	196	147	77	137	120
1979	95	89	107	126	208	280	317	286	195	114	137	120
1980	95	1,651	545	278	1,310	1,400	990	940	848	435	337	274
1981	180	181	172	231	533	283	317	286	195	154	237	394
1982	1,334	2,960	1,762	3,511	2,721	1,612	1,203	1,148	1,046	660	1,342	1,640
1983	1,411	2,279	3,409	1,767	4,196	3,515	1,684	1,629	1,527	829	2,291	2,726
1984	1,474	1,063	396	231	858	1,071	661	611	519	377	565	274
1985	180	181	172	231	533	283	317	286	195	154	237	195
1986	208	5,208	2,368	405	1,643	1,226	817	764	667	462	362	304
1987	180	181	171	233	502	224	233	200	147	126	237	195
1988	178	181	172	233	177	220	221	196	147	77	137	120
1989	95	89	107	126	533	283	317	286	195	154	237	195
1990	178	181	171	233	502	224	233	200	147	126	237	195
Minimum	95	89	106	126	177	220	221	196	147	77	137	120
Maximum	3,404	5,208	3,409	3,511	4,196	3,515	1,684	1,629	1,527	829	3,365	4,131
Average	487	606	447	460	1,025	839	542	501	415	287	403	456

92 229 10-9992-WSIP  
 Composite Program III - GFS Eqn for Maint. of Camanche Hypo  
 Fish Releases per Production Goal Faxed 1-2-92 w/Ramping  
 Drought Planning Sequence - 1976-1977-185 TAF

Flow into the Delta in CFS

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1921	617	706	615	119	1,064	1,489	353	334	338	297	291	219
1922	127	226	105	110	2,543	2,111	465	446	450	392	291	307
1923	436	393	105	110	581	723	276	256	261	241	291	219
1924	127	133	105	110	325	3	0	4	8	58	191	140
1925	125	133	106	110	325	466	19	0	4	99	291	219
1926	127	133	105	110	325	3	0	0	4	49	191	140
1927	125	133	105	110	819	1,154	448	429	434	282	355	219
1928	127	133	1,006	110	325	466	19	0	4	99	291	219
1929	127	133	105	110	325	3	0	0	4	58	191	140
1930	125	133	106	110	325	3	0	0	4	49	191	140
1931	125	133	105	110	0	0	0	4	8	9	91	65
1932	42	42	40	5	325	3	0	0	4	49	191	140
1933	125	133	105	110	325	3	0	0	4	49	191	140
1934	125	133	105	110	325	3	0	0	4	58	191	140
1935	125	133	106	110	325	3	0	0	4	49	191	140
1936	125	2,080	438	473	1,374	1,093	433	414	418	324	291	219
1937	127	133	697	110	656	798	350	331	336	243	291	1,166
1938	125	1,172	1,643	2,230	2,638	1,792	542	523	527	403	291	219
1939	127	133	105	110	325	3	0	0	4	58	191	140
1940	125	133	442	110	1,420	719	271	252	257	275	291	219
1941	489	847	586	120	1,013	1,236	500	481	485	290	291	393
1942	1,308	991	105	110	1,981	1,614	552	533	538	365	495	367
1943	1,471	964	1,772	589	1,392	827	379	360	365	287	291	219
1944	127	133	105	110	325	3	0	0	4	49	191	140
1945	125	260	105	110	706	847	400	381	385	280	466	1,030
1946	567	157	105	110	578	696	249	229	234	249	291	219
1947	127	133	105	110	325	3	0	0	4	49	191	140
1948	125	133	105	110	325	3	0	0	4	49	191	140
1949	125	133	105	110	325	3	0	0	4	49	191	140
1950	125	365	202	174	749	900	439	420	425	288	3,297	4,049
1951	1,268	1,063	347	186	460	601	154	135	139	229	291	597
1952	1,299	1,202	986	2,883	2,813	1,437	761	742	747	416	291	219
1953	130	1,098	105	110	472	614	166	147	152	216	291	219
1954	127	133	105	110	325	3	0	0	4	103	191	140
1955	125	133	105	110	325	3	0	0	4	49	191	1,954
1956	2,978	937	188	198	1,903	1,440	552	533	538	393	291	219
1957	127	133	105	110	361	502	55	36	40	193	291	219
1958	125	1,073	916	1,739	2,309	1,496	642	622	627	392	291	219
1959	127	133	105	110	325	3	0	0	4	49	191	140
1960	125	133	105	110	325	3	0	0	4	49	191	140
1961	125	133	105	110	0	0	0	0	4	9	91	65
1962	42	42	40	5	325	3	0	0	4	49	191	140
1963	125	1,482	105	110	1,331	999	493	473	478	335	594	219
1964	127	133	105	110	325	3	0	0	4	49	191	2,324
1965	2,221	822	105	258	1,023	1,135	688	669	673	327	519	222
1966	251	133	105	110	325	3	0	0	4	49	191	140
1967	218	469	817	1,033	2,900	1,284	837	818	822	443	291	219
1968	127	133	105	110	325	3	0	0	4	49	191	140
1969	936	1,566	707	2,194	3,124	1,370	697	677	682	440	291	219
1970	3,347	1,038	448	110	453	595	147	128	133	195	567	716
1971	647	588	472	110	575	717	270	250	255	231	291	307
1972	142	133	105	110	325	3	0	0	4	49	191	140
1973	840	1,226	553	110	616	757	310	290	295	270	1,289	828
1974	1,321	218	864	569	1,016	1,030	582	563	567	344	291	219
1975	127	133	109	110	981	1,122	675	655	660	352	291	219
1976	127	133	105	110	325	3	0	4	8	58	191	140
1977	125	133	106	110	0	0	0	4	8	9	91	65
1978	42	42	40	5	0	0	0	4	8	9	91	65
1979	42	42	40	5	0	0	0	0	4	9	91	65
1980	42	1,603	479	156	1,101	1,120	672	653	657	329	291	219
1981	127	133	105	110	325	3	0	0	4	49	191	339
1982	1,223	2,862	1,632	3,323	2,442	1,257	810	790	795	510	1,248	1,527
1983	1,300	2,180	3,280	1,579	3,917	3,160	1,290	1,271	1,276	679	2,197	2,613
1984	1,421	1,015	329	110	649	791	343	324	329	271	519	219
1985	127	133	105	110	325	3	0	0	4	49	191	140
1986	125	5,133	2,269	249	1,397	907	460	440	445	334	291	219
1987	127	133	105	110	325	3	0	0	4	58	191	140
1988	125	133	106	110	0	0	0	4	8	9	91	65
1989	42	42	40	5	325	3	0	0	4	49	191	140
1990	125	133	105	110	325	3	0	0	4	58	191	140
Minimum	42	42	40	5	0	0	0	0	4	9	91	65
Maximum	3,347	5,133	3,280	3,323	3,917	3,160	1,290	1,271	1,276	679	3,297	4,049
Average	428	553	374	332	816	562	233	223	228	184	353	395

## Pardee Reservoir Storage In Acre-Feet

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1921	170,937	141,622	130,013	108,820	197,781	209,995	196,279	188,534	181,390	178,267	182,820	182,684
1922	182,694	174,738	148,392	165,620	209,985	209,995	199,981	190,656	180,262	176,113	178,486	182,684
1923	192,675	188,172	188,852	209,995	209,985	209,995	202,489	188,985	176,550	169,351	177,243	182,684
1924	194,547	187,285	180,011	182,207	172,592	157,803	143,256	128,850	115,831	108,563	105,591	105,064
1925	111,938	185,709	209,985	209,995	209,985	209,995	186,092	159,477	135,498	114,897	124,803	136,469
1926	149,413	169,133	169,347	196,597	207,237	200,241	183,917	177,671	169,339	166,290	180,935	182,684
1927	196,598	209,960	209,985	209,995	209,985	209,995	200,583	186,847	173,183	163,730	174,251	182,684
1928	188,440	189,518	209,985	209,995	209,985	208,735	198,264	186,710	176,400	169,573	180,555	177,314
1929	170,924	166,861	168,809	179,743	179,821	173,999	169,369	165,103	160,497	159,577	168,092	174,272
1930	181,839	180,972	200,068	205,482	203,414	198,724	187,530	184,397	173,423	165,892	176,884	182,684
1931	174,956	167,345	166,558	163,775	158,508	146,596	139,263	125,806	111,880	100,395	96,464	100,705
1932	90,813	122,818	104,756	120,422	164,562	209,995	206,707	195,235	182,329	171,476	178,626	182,684
1933	183,652	166,805	170,852	198,172	209,985	209,995	196,390	188,315	179,707	175,457	180,372	182,684
1934	192,951	193,749	209,985	205,071	189,972	188,258	188,425	169,684	152,374	137,249	137,463	137,032
1935	142,402	154,356	174,401	209,995	209,985	209,995	196,955	181,171	166,464	156,953	168,215	180,528
1936	209,985	209,960	200,856	198,444	209,985	209,995	199,698	188,495	177,130	169,261	177,534	182,684
1937	182,770	209,960	209,985	208,665	209,985	209,995	194,815	184,970	174,240	167,829	172,984	182,684
1938	190,542	209,960	209,985	209,995	209,985	209,995	209,985	187,438	162,989	141,858	156,739	172,277
1939	188,072	182,479	188,396	196,503	184,518	181,695	177,131	176,701	170,512	169,610	175,426	182,684
1940	209,985	209,960	209,985	209,995	209,985	208,080	191,976	179,877	167,144	159,385	169,032	182,684
1941	194,359	209,960	206,673	202,142	209,985	209,995	200,657	192,005	182,688	177,180	181,992	182,684
1942	209,985	209,960	180,012	187,695	209,985	209,995	209,757	199,238	187,728	178,358	192,074	182,684
1943	209,985	207,583	209,985	209,995	209,985	209,995	199,341	188,763	176,335	169,277	178,005	182,684
1944	192,877	191,586	206,464	209,995	209,985	182,968	171,562	168,122	167,820	163,539	180,015	182,684
1945	184,163	209,960	209,985	196,447	209,985	209,995	189,601	178,505	166,588	159,496	166,323	182,684
1946	180,569	160,269	143,890	138,976	209,985	200,225	186,967	179,139	171,815	169,871	181,893	182,684
1947	179,744	180,857	191,241	196,451	192,885	192,037	185,898	183,433	179,142	183,652	184,557	182,684
1948	197,079	188,356	192,050	209,995	193,422	209,995	191,474	172,858	153,484	136,163	147,524	161,500
1949	169,008	161,194	176,778	191,097	209,985	200,645	191,359	187,538	183,074	181,423	188,057	182,684
1950	209,985	209,960	209,985	209,995	209,985	209,995	196,611	183,072	170,183	162,581	209,995	209,985
1951	209,985	209,960	209,985	209,995	209,985	209,995	191,261	180,156	168,737	158,105	164,461	182,684
1952	209,985	209,960	209,985	209,995	209,985	209,995	209,985	192,271	170,968	151,599	165,959	182,684
1953	209,985	199,273	209,985	209,995	209,985	209,995	207,285	194,490	183,706	179,375	188,591	182,684
1954	201,135	209,960	209,985	209,995	209,985	209,995	190,511	183,801	180,510	180,629	191,198	182,684
1955	189,408	185,623	200,045	209,012	209,985	209,995	194,184	189,538	182,645	179,034	183,599	209,985
1956	209,985	209,960	209,985	209,995	209,985	209,995	203,338	190,346	176,265	170,172	182,545	182,684
1957	195,193	209,960	209,985	207,320	209,985	209,995	191,040	175,295	161,943	158,229	174,504	182,684
1958	206,162	209,960	209,985	209,995	209,985	209,995	209,985	204,742	191,925	185,341	193,175	182,684
1959	209,934	209,960	209,985	209,995	197,540	188,896	179,821	171,919	163,941	159,414	166,322	174,120
1960	171,310	193,431	209,985	209,995	209,985	209,995	196,217	183,753	171,613	161,754	169,055	176,845
1961	177,273	170,064	167,892	167,954	156,888	154,058	150,783	146,594	143,302	140,437	138,846	135,951
1962	132,606	180,882	170,269	183,950	179,329	209,995	196,076	185,704	183,696	194,625	198,734	182,684
1963	200,697	209,960	205,641	209,995	209,985	209,995	195,861	185,932	175,187	168,467	181,387	182,684
1964	195,156	187,530	198,838	209,151	202,649	185,336	173,639	168,214	163,628	163,579	179,111	209,985
1965	209,985	209,960	205,121	209,995	209,985	209,995	194,508	191,639	201,223	209,985	209,995	182,684
1966	175,858	157,472	162,251	192,459	203,119	194,224	172,874	165,187	165,619	165,224	170,430	182,684
1967	209,985	197,976	209,985	209,995	209,985	209,995	209,985	200,385	190,369	183,699	192,402	182,684
1968	195,975	209,960	209,985	209,995	202,977	203,528	185,414	178,173	173,538	171,438	181,833	182,684
1969	209,985	209,960	209,985	209,995	209,985	209,995	209,985	204,593	197,452	194,411	195,702	182,684
1970	209,985	209,960	209,985	196,815	209,985	209,995	197,910	182,543	167,405	156,879	184,370	209,985
1971	207,929	199,730	207,689	204,766	205,287	209,995	206,486	209,985	206,192	207,289	203,680	182,684
1972	173,174	158,543	183,611	209,995	209,985	209,995	194,360	187,646	186,536	190,844	195,842	182,684
1973	209,985	209,960	207,698	206,873	209,985	209,995	198,402	186,437	176,107	172,459	196,177	209,985
1974	209,985	203,493	209,985	209,995	209,985	209,995	209,985	209,985	209,780	203,132	201,128	182,684
1975	184,920	203,164	209,985	196,510	209,985	209,995	209,037	209,985	209,995	209,985	209,995	182,684
1976	186,537	176,614	170,843	167,292	158,191	147,375	135,361	124,612	114,348	100,359	90,096	75,649
1977	65,945	50,170	38,553	34,845	35,627	34,639	33,596	32,367	32,527	26,024	19,290	16,800
1978	16,800	16,800	27,523	32,324	41,805	31,880	27,176	21,958	28,015	28,043	19,545	16,800
1979	26,185	42,164	97,402	149,032	192,969	209,995	195,073	166,887	138,830	125,695	144,587	172,171
1980	209,985	209,960	209,985	209,995	209,985	209,995	199,885	199,222	187,809	179,180	183,592	182,684
1981	209,985	209,960	209,985	209,995	207,460	204,735	189,002	178,339	175,839	181,981	196,863	209,985
1982	209,985	209,960	209,985	209,995	209,985	209,995	209,985	205,822	191,465	184,079	209,995	209,985
1983	209,985	209,960	209,985	209,995	209,985	209,995	209,985	209,985	209,995	209,985	209,995	209,985
1984	209,985	209,960	209,985	209,995	209,985	209,995	205,460	207,200	195,657	190,419	202,593	182,684
1985	165,078	168,357	202,046	209,995	200,706	197,931	179,662	175,205	176,871	185,015	193,855	182,684
1986	199,352	209,960	209,985	209,995	209,985	209,995	201,474	188,120	175,407	164,918	177,538	182,684
1987	186,959	184,239	191,949	192,810	179,066	169,320	169,013	168,319	165,412	151,700	142,814	139,615
1988	142,617	134,392	131,153	133,372	128,688	127,702	126,738	121,511	114,191	100,666	93,481	86,854
1989	79,807	73,796	119,770	173,082	209,985	209,995	197,268	181,849	169,503	148,		

92 229 10-9995-WSIP  
 Composite Program IV - GFS Eqn for Maint. of Camanche Hypol  
 Fish Releases per Production Goal Faxed 1-2-92 w/Ramping  
 Drought Planning Sequence - 1976-1977-185 TAF

Pardee Reservoir Elevation In Feet

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1921	549.1	533.1	526.1	512.2	562.2	567.7	561.5	557.8	554.3	552.8	555.1	555.0
1922	555.0	551.0	537.0	546.3	567.7	567.7	563.2	558.8	553.8	551.7	552.9	555.0
1923	559.8	557.6	558.0	567.7	567.7	567.7	564.3	558.0	551.9	548.3	552.3	555.0
1924	560.7	557.2	553.7	554.8	549.9	542.2	534.0	525.4	517.0	512.0	509.9	509.6
1925	514.3	556.5	567.7	567.7	567.7	567.7	556.6	543.1	529.4	516.3	522.8	530.0
1926	537.5	548.2	548.3	561.6	566.4	563.3	555.6	552.5	548.3	546.7	554.1	555.0
1927	561.6	567.7	567.7	567.7	567.7	567.7	563.4	557.0	550.2	545.3	550.8	555.0
1928	557.8	558.3	567.7	567.7	567.7	567.1	562.4	556.9	551.9	548.4	553.9	552.3
1929	549.1	547.0	548.0	553.5	553.6	550.7	548.3	546.1	543.6	543.1	547.6	550.8
1930	554.6	554.1	563.2	565.7	564.7	562.6	557.3	555.8	550.4	546.5	552.1	555.0
1931	551.1	547.2	546.8	545.4	542.6	535.9	531.7	523.5	514.3	506.2	503.3	506.4
1932	498.9	521.5	509.3	520.0	545.8	567.7	566.2	561.0	554.8	549.4	553.0	555.0
1933	555.5	547.0	549.1	562.3	567.7	567.7	561.5	557.7	553.5	551.4	553.8	555.0
1934	559.9	560.3	567.7	565.5	558.5	557.7	557.8	548.5	539.2	530.5	530.6	530.3
1935	533.5	540.3	550.9	567.7	567.7	567.7	561.8	554.2	546.8	541.7	547.7	553.9
1936	567.7	567.7	563.6	562.5	567.7	567.7	563.0	557.8	552.2	548.2	552.4	555.0
1937	555.0	567.7	567.7	567.1	567.7	567.7	560.8	556.1	550.8	547.4	550.1	555.0
1938	558.8	567.7	567.7	567.7	567.7	567.7	567.7	557.3	545.0	533.2	541.6	549.8
1939	557.6	554.9	557.7	561.6	555.9	554.5	552.6	552.0	548.9	548.4	551.4	555.0
1940	567.7	567.7	567.7	567.7	567.7	566.8	559.4	553.6	547.1	543.0	548.1	555.0
1941	560.6	567.7	566.2	564.2	567.7	567.7	563.5	559.5	555.0	552.3	554.6	555.0
1942	567.7	567.7	553.7	557.4	567.7	567.7	567.6	562.8	557.4	552.9	559.5	555.0
1943	567.7	566.6	567.7	567.7	567.7	567.7	562.9	557.9	551.8	548.2	552.7	555.0
1944	559.9	559.3	566.1	567.7	567.7	555.1	549.4	547.6	547.5	545.2	553.7	555.0
1945	555.7	567.7	567.7	561.5	567.7	567.7	558.3	552.9	546.9	543.1	546.7	555.0
1946	553.9	543.5	534.4	531.5	567.7	563.3	557.1	553.2	549.6	548.6	554.6	555.0
1947	553.5	554.1	559.1	561.5	559.9	559.5	556.5	555.3	553.2	555.5	555.9	555.0
1948	561.8	557.7	559.5	567.7	560.1	567.7	559.2	550.1	539.8	529.8	536.5	544.2
1949	548.1	544.0	552.1	559.0	567.7	563.5	559.2	557.3	555.2	554.4	557.6	555.0
1950	567.7	567.7	567.7	567.7	567.7	567.7	561.6	555.2	548.7	544.7	567.7	567.7
1951	567.7	567.7	567.7	567.7	567.7	567.7	559.1	553.7	548.0	542.3	545.7	555.0
1952	567.7	567.7	567.7	567.7	567.7	567.7	567.7	559.6	549.1	538.8	546.5	555.0
1953	567.7	562.8	567.7	567.7	567.7	567.7	566.5	560.6	555.5	553.4	557.8	555.0
1954	563.7	567.7	567.7	567.7	567.7	567.7	558.8	555.5	553.9	554.0	559.1	555.0
1955	558.2	556.4	563.2	567.2	567.7	567.7	560.5	558.3	555.0	553.2	555.4	567.7
1956	567.7	567.7	567.7	567.7	567.7	567.7	564.7	558.7	551.8	548.7	554.9	555.0
1957	561.0	567.7	567.7	566.5	567.7	567.7	559.0	551.3	544.4	542.4	550.9	555.0
1958	566.0	567.7	567.7	567.7	567.7	567.7	567.7	565.3	559.4	556.3	560.0	555.0
1959	567.6	567.7	567.7	567.7	562.0	558.0	553.6	549.6	545.5	543.0	546.7	550.7
1960	549.3	560.1	567.7	567.7	567.7	567.7	561.4	555.5	549.4	544.3	548.1	552.1
1961	552.3	548.7	547.5	547.6	541.7	540.1	538.3	535.9	534.0	532.4	531.4	529.7
1962	527.7	554.1	548.8	555.6	553.3	567.7	561.4	556.5	555.5	560.7	562.6	555.0
1963	563.5	567.7	565.7	567.7	567.7	567.7	561.3	556.6	551.3	547.8	554.3	555.0
1964	560.9	557.3	562.6	567.3	564.4	556.3	550.5	547.7	545.3	545.3	553.2	567.7
1965	567.7	567.7	565.5	567.7	567.7	567.7	560.6	559.3	563.7	567.7	567.7	555.0
1966	551.6	542.0	544.6	559.7	564.6	560.5	550.1	546.1	546.3	546.1	548.8	555.0
1967	567.7	562.2	567.7	567.7	567.7	567.7	567.7	563.3	558.7	555.5	559.6	555.0
1968	561.3	567.7	567.7	567.7	564.5	564.8	556.3	552.8	550.4	549.4	554.6	555.0
1969	567.7	567.7	567.7	567.7	567.7	567.7	567.7	565.3	562.0	560.6	561.2	555.0
1970	567.7	567.7	567.7	561.7	567.7	567.7	562.2	554.9	547.3	541.7	555.8	567.7
1971	566.8	563.0	566.6	565.3	565.6	567.7	566.1	567.7	566.0	566.5	564.8	555.0
1972	550.2	542.6	555.4	567.7	567.7	567.7	560.6	557.4	556.9	558.9	561.3	555.0
1973	567.7	567.7	566.7	566.3	567.7	567.7	562.4	556.8	551.7	549.9	561.4	567.7
1974	567.7	564.8	567.7	567.7	567.7	567.7	567.7	567.7	567.6	564.6	563.7	555.0
1975	556.1	564.6	567.7	561.6	567.7	567.7	567.7	567.7	567.7	567.7	567.7	555.0
1976	556.9	552.0	549.1	547.2	542.4	536.4	529.3	522.7	516.0	506.2	498.3	486.0
1977	476.8	459.0	443.0	436.9	438.2	436.5	434.7	432.5	432.8	419.7	403.4	396.5
1978	396.5	396.5	422.9	432.4	447.9	431.6	422.2	410.2	424.0	424.0	404.0	396.5
1979	420.0	448.4	504.0	537.3	559.9	567.7	560.9	547.0	531.4	523.4	534.8	549.7
1980	567.7	567.7	567.7	567.7	567.7	567.7	567.7	562.8	557.5	553.3	555.4	555.0
1981	567.7	567.7	567.7	567.7	565.3	565.3	558.0	552.8	551.6	554.6	561.7	567.7
1982	567.7	567.7	567.7	567.7	567.7	567.7	567.7	565.8	559.2	555.7	567.7	567.7
1983	567.7	567.7	567.7	567.7	567.7	567.7	567.7	567.7	567.7	567.7	567.7	567.7
1984	567.7	567.7	567.7	567.7	567.7	567.7	567.7	566.4	561.2	558.7	564.4	555.0
1985	546.1	547.8	564.1	567.7	563.5	562.2	553.5	551.3	552.1	556.1	560.3	555.0
1986	562.9	567.7	567.7	567.7	567.7	567.7	563.8	557.6	551.4	546.0	552.4	555.0
1987	557.1	555.7	559.4	559.8	553.2	548.3	548.1	547.8	546.2	538.8	533.7	531.9
1988	533.6	528.8	526.8	528.1	525.3	524.6	524.0	520.7	515.9	506.4	501.0	495.7
1989	489.7	484.3	519.6	550.2	567.7	567.7	561.9	554.6	548.4	536.7	546.0	553.2
1990	559.6	558.4	565.2	567.7	565.6	549.8	546.1	540.4	534.5	530.3	522.9	516.8
Minimum	396.5	396.5	422.9	432.4	438.2	431.6	422.2	410.2	424.0	419.7	403.4	396.5
Maximum	567.7	567.7	567.7	567.7	567.7	567.7	567.7	567.7	567.7	567.7	567.7	567.7
Average	551.0	552.3	554.9	557.5	560.1	559.3	554.8	550.1	545.6	542.2	545.6	546.2

## Total Pardee Releases in CFS

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1921	1,100	1,100	1,080	1,064	1,091	2,366	358	232	239	232	83	248
1922	297	679	1,005	559	1,916	4,247	513	274	283	274	254	632
1923	422	503	330	736	1,604	1,383	386	328	339	328	38	105
1924	0	0	0	0	128	132	128	128	132	128	0	0
1925	0	0	260	1,195	2,491	1,694	522	522	540	522	0	0
1926	0	38	0	0	238	246	581	420	246	238	90	258
1927	394	859	634	990	1,989	2,662	394	340	351	340	39	337
1928	272	65	862	1,233	2,327	296	295	286	296	286	0	0
1929	20	0	0	0	185	191	433	185	191	185	0	0
1930	0	0	0	170	324	968	519	396	321	310	0	191
1931	0	0	0	0	109	113	109	109	113	109	0	0
1932	339	0	911	462	479	2,198	549	343	354	343	44	124
1933	0	65	0	0	315	460	648	289	299	289	105	318
1934	260	9	71	0	174	180	272	174	180	174	0	0
1935	0	101	0	1,121	1,286	2,070	458	357	369	357	0	0
1936	60	2,129	1,100	1,100	2,509	1,963	403	330	342	330	52	157
1937	62	186	1,050	1,100	1,698	1,467	438	307	317	307	107	320
1938	363	925	2,079	1,573	4,755	3,968	601	560	579	560	0	0
1939	2	0	0	0	215	223	400	348	223	215	160	23
1940	89	1,379	1,462	1,199	3,144	1,100	417	340	351	340	59	183
1941	332	568	1,100	1,100	1,677	2,286	460	298	308	298	136	407
1942	648	969	1,100	1,090	2,314	3,519	568	351	362	351	206	605
1943	759	960	2,089	2,086	2,820	1,441	432	359	371	359	60	171
1944	0	0	127	115	499	879	561	413	338	248	327	524
1945	296	770	686	970	1,401	2,035	531	325	335	325	188	570
1946	740	787	1,073	1,085	1,399	1,100	379	246	254	246	182	299
1947	287	174	0	360	245	183	434	362	183	177	0	166
1948	0	0	0	341	1,100	2,151	461	461	476	461	0	0
1949	57	0	139	757	806	967	336	256	209	202	88	249
1950	27	749	750	1,215	1,525	2,062	412	363	375	363	1,805	4,067
1951	1,242	1,096	1,113	1,683	2,023	538	510	340	351	340	324	472
1952	837	1,265	1,344	1,807	4,331	3,984	1,075	568	586	568	30	324
1953	346	529	377	1,191	829	1,691	496	378	390	378	183	320
1954	164	316	598	879	1,027	280	397	237	245	237	119	575
1955	304	121	0	0	362	462	359	421	233	225	96	1,968
1956	2,693	1,297	1,186	1,281	2,719	2,875	499	373	386	373	116	337
1957	0	261	717	396	1,071	1,740	413	330	341	330	62	409
1958	48	1,066	1,291	2,207	2,864	3,184	561	376	388	376	114	324
1959	44	666	292	41	223	231	236	223	231	223	0	0
1960	0	0	111	170	538	485	300	292	301	292	0	0
1961	23	0	0	0	216	223	216	216	223	216	0	0
1962	0	0	665	1,100	788	1,262	420	336	347	336	394	717
1963	275	940	706	1,546	3,088	1,915	467	355	367	355	102	349
1964	432	335	0	0	225	428	340	225	232	225	71	2,544
1965	2,281	1,126	1,100	1,463	1,790	2,286	736	348	333	389	601	857
1966	412	330	239	0	168	174	443	456	174	168	201	832
1967	421	763	1,102	1,601	2,233	3,779	1,648	375	387	375	330	452
1968	302	131	390	271	188	194	353	194	194	188	112	331
1969	1,949	1,602	1,238	2,218	4,184	3,271	721	460	475	460	253	795
1970	1,915	1,096	1,286	999	1,252	1,586	491	387	400	387	100	498
1971	743	805	817	917	662	1,656	583	389	332	321	227	673
1972	374	428	203	21	230	767	430	293	163	158	199	581
1973	538	1,139	1,016	954	1,777	1,287	502	318	329	318	166	714
1974	1,159	825	1,509	1,603	1,867	1,933	568	476	323	312	153	439
1975	30	197	835	1,100	1,135	2,559	667	454	459	369	302	679
1976	17	0	0	0	67	69	67	67	69	67	0	0
1977	0	0	0	0	0	0	0	0	0	0	0	0
1978	0	0	0	0	0	0	157	194	101	100	152	99
1979	22	0	0	104	463	728	463	463	478	463	0	0
1980	2,065	2,346	1,526	1,127	1,759	2,437	837	333	345	333	315	483
1981	83	205	530	579	149	154	594	426	346	322	170	808
1982	1,489	2,642	2,318	3,838	4,261	2,624	835	528	546	528	627	1,659
1983	1,692	2,380	3,789	2,061	3,021	5,824	2,953	699	541	534	1,637	2,638
1984	1,470	1,205	1,237	1,222	1,950	1,411	582	348	359	348	226	673
1985	475	164	0	773	270	128	584	422	158	255	161	469
1986	254	4,353	2,879	1,762	2,745	1,804	436	406	420	406	255	305
1987	0	0	0	0	100	104	100	100	104	100	0	0
1988	0	0	0	0	100	104	100	100	104	100	0	0
1989	0	0	0	161	790	832	416	412	426	412	7	0
1990	55	107	0	27	301	783	301	301	311	301	0	0

Minimum	0	0	0	0	0	0	0	0	0	0	0	0
Maximum	2,693	4,353	3,789	3,838	4,755	5,824	2,953	699	586	568	1,805	4,067
Average	443	611	690	810	1,322	1,433	498	333	311	301	169	461

**92 229 10-9995-WSJP**  
**Composite Program IV - GFS Eqn for Maint. of Camanche Hypol**  
**Fish Releases per Production Goal Faxed 1-2-92 w/Ramping**  
**Drought Planning Sequence - 1976-1977-185 TAF**

**Camanche Reservoir Storage in Acre-Feet**

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1921	338,328	360,625	386,185	430,879	409,214	430,879	396,877	361,763	337,579	319,000	301,565	301,024
1922	310,102	336,492	388,787	403,459	334,188	430,879	399,703	360,466	332,301	310,181	304,255	320,552
1923	318,579	323,058	331,759	359,935	397,530	404,448	374,096	346,783	330,742	320,922	299,538	287,377
1924	282,092	277,962	267,191	253,238	231,382	217,952	209,797	201,828	201,119	198,774	183,193	171,758
1925	161,735	155,591	161,450	216,347	321,738	359,823	350,677	347,970	355,444	365,386	343,245	324,693
1926	313,103	306,611	293,591	276,835	251,845	241,312	248,244	248,467	246,030	248,440	241,042	242,986
1927	257,298	301,269	327,194	351,129	388,991	430,879	393,855	360,156	337,545	325,579	303,069	305,816
1928	310,307	304,831	273,355	330,337	425,524	384,908	366,638	354,344	352,233	352,140	330,709	312,886
1929	303,111	292,783	281,921	268,406	242,020	232,671	235,779	227,007	224,273	224,573	207,978	194,657
1930	190,978	186,943	176,275	173,172	162,212	195,351	205,497	208,260	214,123	220,572	204,779	202,076
1931	197,296	192,568	181,462	167,955	165,948	152,054	145,027	137,357	136,241	135,781	126,566	121,991
1932	136,946	136,313	183,664	199,904	190,626	296,279	300,805	295,824	299,481	307,312	293,392	287,503
1933	277,467	269,854	257,608	239,496	219,854	222,245	233,455	225,758	226,632	232,266	221,881	232,176
1934	243,652	243,429	236,487	223,358	204,077	193,814	194,047	188,633	190,777	190,933	176,116	163,145
1935	152,712	147,257	136,032	189,075	228,660	326,478	325,197	320,931	325,343	334,569	318,286	304,753
1936	301,229	301,269	336,322	362,680	408,948	430,879	394,771	360,873	337,965	324,026	304,063	296,347
1937	290,727	301,031	327,194	375,326	416,075	425,934	396,416	365,417	345,207	334,641	319,741	263,759
1938	272,818	258,403	284,328	231,453	335,152	430,879	396,665	366,819	348,731	342,446	317,673	296,235
1939	284,553	274,902	264,274	246,136	222,505	214,313	215,601	216,993	216,553	219,061	212,193	199,634
1940	198,412	272,505	297,290	351,062	430,893	423,671	398,096	374,364	361,222	350,845	331,904	327,691
1941	316,895	301,269	330,505	381,892	399,000	430,879	394,167	354,130	325,195	311,103	297,200	295,652
1942	257,378	254,364	310,692	358,477	349,140	430,879	396,438	355,350	325,668	308,961	288,261	297,642
1943	255,389	252,762	273,355	351,129	413,952	419,555	387,085	356,860	337,637	327,025	307,379	298,481
1944	287,821	282,060	279,801	269,637	260,927	287,915	293,254	292,631	295,458	298,260	304,474	323,652
1945	327,091	290,297	322,427	362,210	382,175	423,765	397,118	364,375	342,521	331,802	312,023	281,665
1946	287,819	320,032	374,358	420,449	430,893	425,215	398,918	371,012	353,803	338,369	328,340	328,067
1947	331,510	330,373	318,701	322,029	297,157	282,760	280,336	276,686	270,312	269,608	253,683	249,983
1948	238,397	227,703	216,716	221,360	247,052	317,980	311,224	309,865	317,888	324,647	307,993	295,158
1949	286,489	276,074	277,007	303,710	313,840	345,700	336,815	326,312	321,168	320,278	309,473	310,820
1950	301,269	301,269	327,194	373,996	396,033	430,879	391,807	356,575	333,074	322,749	231,453	231,453
1951	231,453	231,453	273,355	351,129	424,690	390,947	378,302	361,671	355,342	348,145	346,799	328,570
1952	301,269	301,269	319,236	240,437	306,213	422,935	403,132	359,090	328,041	319,743	296,636	296,614
1953	301,269	257,696	269,026	322,985	319,713	352,057	335,334	317,883	310,780	305,954	295,018	296,049
1954	294,336	301,268	327,194	357,998	376,794	335,690	324,053	309,056	304,183	301,264	286,755	306,065
1955	318,734	316,065	302,907	286,332	268,955	271,144	264,215	264,363	260,974	261,902	251,729	244,416
1956	231,453	247,430	300,244	352,094	378,019	430,879	391,167	350,558	321,618	305,149	287,974	288,648
1957	278,284	283,577	319,639	325,827	342,668	381,469	363,521	347,005	340,977	333,069	314,382	321,702
1958	305,092	301,269	327,194	354,084	363,067	430,879	389,338	343,291	309,087	291,969	274,698	273,702
1959	265,768	297,162	303,098	287,764	261,687	250,237	235,980	224,257	222,061	222,938	206,349	192,267
1960	187,334	184,031	186,258	183,327	185,202	189,579	186,421	182,986	189,413	194,753	179,687	170,004
1961	166,082	161,179	150,429	137,326	142,128	134,902	132,368	130,196	135,233	141,171	131,630	122,897
1962	115,751	116,554	150,366	204,533	213,587	263,586	260,552	255,515	259,036	268,962	276,074	307,225
1963	310,552	233,443	266,050	344,136	406,958	430,879	395,410	359,705	335,240	321,806	289,965	291,828
1964	309,634	317,558	304,919	286,837	261,505	262,148	254,147	242,337	239,226	241,388	229,872	240,437
1965	244,958	257,559	311,941	363,348	385,615	423,371	390,808	341,665	303,358	291,985	293,130	328,390
1966	335,396	345,180	346,695	328,566	299,016	283,999	282,274	284,421	277,516	274,802	272,246	313,004
1967	301,088	313,073	326,109	354,867	288,669	406,309	419,583	361,256	315,193	295,360	292,415	300,077
1968	310,370	301,088	316,228	314,092	285,877	272,143	264,899	251,366	245,875	245,076	237,223	245,907
1969	294,035	301,088	326,109	314,413	352,094	430,879	393,930	348,001	314,249	299,178	290,047	318,562
1970	231,212	231,212	280,107	321,638	347,544	376,653	321,691	349,417	346,195	343,462	314,414	301,088
1971	303,144	311,319	328,404	364,914	347,656	373,992	358,884	338,385	324,371	315,179	307,207	328,390
1972	337,900	352,506	352,482	336,217	310,358	330,539	327,552	319,418	312,386	309,082	306,657	328,390
1973	301,088	301,088	328,396	367,086	415,377	416,929	394,064	366,457	349,602	339,820	270,533	263,467
1974	252,977	283,500	319,296	371,387	399,904	424,363	390,016	355,652	322,455	306,555	293,717	302,179
1975	292,532	297,501	326,109	374,457	361,099	416,832	381,880	341,106	310,405	298,074	293,771	316,172
1976	310,263	305,195	294,092	280,491	254,871	237,609	225,545	214,184	209,775	202,848	186,988	173,024
1977	164,297	156,419	147,824	133,990	125,691	105,381	92,288	78,673	71,612	65,061	55,605	49,297
1978	45,746	43,075	38,668	31,921	24,467	5,564	4,000	4,000	4,000	4,000	4,000	4,000
1979	4,000	6,502	4,186	4,000	23,176	43,882	52,956	61,942	80,044	99,700	90,775	85,735
1980	212,093	248,696	308,806	355,651	372,653	421,359	397,641	348,946	311,750	297,347	293,496	304,588
1981	301,086	301,088	326,109	342,811	312,009	295,671	302,939	303,027	306,206	314,002	282,870	231,152
1982	245,863	231,152	270,642	292,045	374,401	419,874	380,399	329,144	292,406	277,134	236,759	243,150
1983	270,401	281,072	317,487	331,475	247,310	369,638	430,893	360,682	293,880	267,025	231,152	231,152
1984	231,152	240,075	290,357	345,226	399,788	404,473	382,067	351,796	332,319	322,825	304,752	328,387
1985	345,990	342,691	333,920	361,399	337,724	319,821	326,304	326,020	318,241	321,229	317,228	328,390
1986	311,721	236,156	272,873	351,129	407,259	427,512	388,121	353,799	332,952	320,471	310,532	307,362
1987	301,127	296,612	291,395	277,107	253,472	238,226	227,481	217,182	214,346	209,917	194,236	182,072
1988	177,923	172,450	160,904	148,208	145,751	131,454	124,166	116,229	114,785	113,736	105,159	97,820
1989	94,379	91,787	90,838	94,292	112,307	137,865	142,413	146,887	161,867	175,705	161,186	150,751
1990	149,798	151										

92 229 10-9995-WSIP

Composite Program IV - GFS Eqn for Maint. of Camanche Hypol

Fish Releases per Production Goal Faxed 1-2-92 w/Ramping

Drought Planning Sequence - 1976-1977-185 TAF

## Camanche Reservoir Elevation in Feet

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1921	222.6	225.9	229.5	235.5	232.6	235.5	231.0	226.1	222.5	219.7	217.0	216.9
1922	218.4	222.4	229.8	231.8	222.0	235.5	231.3	225.9	221.7	218.4	217.4	220.0
1923	219.7	220.3	221.7	225.8	231.0	232.0	227.8	223.9	221.5	220.0	216.7	214.7
1924	213.9	213.2	211.4	209.0	205.2	202.7	201.2	199.7	199.5	199.0	195.7	193.3
1925	191.2	189.8	191.1	202.4	220.1	225.8	224.5	224.1	225.1	226.6	223.4	220.6
1926	218.8	217.8	215.7	213.0	208.8	206.9	208.2	208.2	207.8	208.2	206.9	207.2
1927	209.7	217.0	221.0	224.5	229.9	235.5	230.5	225.8	222.5	220.7	217.2	217.7
1928	218.4	217.5	212.4	221.4	234.8	229.3	226.7	225.0	224.7	224.7	221.5	218.8
1929	217.3	215.6	213.8	211.6	207.1	205.4	205.9	204.4	203.9	203.9	200.8	198.1
1930	197.4	196.5	194.3	193.6	191.3	198.3	200.4	200.9	202.0	203.2	200.2	199.7
1931	198.7	197.7	195.4	192.5	192.1	189.0	187.4	185.6	185.3	185.2	182.9	181.8
1932	185.5	185.4	195.8	199.2	197.3	216.2	216.9	216.1	216.7	217.9	215.7	214.8
1933	213.1	211.8	209.8	206.6	203.1	203.5	205.5	204.1	204.3	205.3	203.4	205.3
1934	207.3	207.3	206.1	203.5	200.1	198.0	198.0	196.9	197.3	197.4	194.3	191.5
1935	189.2	187.9	185.3	197.0	204.7	220.9	220.7	220.0	220.7	222.1	219.6	217.5
1936	217.0	217.0	222.3	226.2	232.6	235.5	230.7	225.9	226.6	220.5	217.4	216.2
1937	215.3	216.9	221.0	228.0	233.5	234.8	230.9	226.6	223.7	222.1	219.8	210.8
1938	212.3	209.9	214.2	205.2	222.2	235.5	230.9	226.8	224.2	223.3	219.5	216.2
1939	214.3	212.7	210.9	207.8	203.5	202.0	202.3	202.5	202.4	202.9	201.6	199.2
1940	198.9	212.3	216.3	224.5	235.5	234.5	231.1	227.8	226.0	224.5	221.7	221.0
1941	219.4	217.0	221.5	228.9	231.2	235.5	230.6	225.0	220.7	218.5	216.3	216.1
1942	209.7	209.2	218.4	225.6	224.2	235.5	230.9	225.1	220.7	218.2	214.9	216.4
1943	209.4	208.9	212.4	224.5	233.2	234.0	229.6	225.4	222.5	220.9	217.9	216.5
1944	214.8	213.9	213.5	211.8	210.3	214.8	215.7	215.6	216.0	216.5	217.5	220.4
1945	221.0	215.2	220.2	226.1	228.9	234.5	231.0	226.4	223.3	221.7	218.6	213.8
1946	214.8	219.9	227.8	234.1	235.5	234.7	231.2	227.4	224.9	222.6	221.1	221.1
1947	221.6	221.5	219.7	220.2	216.3	214.0	213.6	213.0	211.9	211.8	209.1	208.5
1948	206.4	204.5	202.5	203.3	207.9	219.6	218.5	218.3	219.6	220.6	218.0	216.0
1949	214.6	212.9	213.0	217.3	218.9	223.7	222.4	220.8	220.1	219.9	218.3	218.5
1950	217.0	217.0	221.0	227.8	230.8	235.5	230.3	225.3	221.9	220.3	205.2	205.2
1951	205.2	205.2	212.4	224.5	234.7	230.1	228.4	226.0	225.1	224.1	223.9	221.2
1952	217.0	217.0	219.8	206.8	217.7	234.4	231.8	225.7	221.1	219.8	216.2	216.2
1953	217.0	209.8	211.7	220.3	219.8	224.7	222.2	219.6	218.5	217.7	216.0	216.1
1954	215.9	217.0	221.0	225.4	228.2	222.2	220.5	218.2	217.4	217.0	214.6	217.7
1955	219.7	219.3	217.2	214.6	211.7	212.1	210.9	210.9	210.3	210.5	208.8	207.5
1956	205.2	208.0	216.8	224.7	228.4	235.5	230.2	224.4	220.1	217.6	214.8	214.9
1957	213.3	214.1	219.8	220.8	223.3	228.8	226.3	223.9	223.0	221.9	219.0	220.1
1958	217.6	217.0	221.0	225.0	226.2	235.5	229.9	223.4	218.2	215.5	212.7	212.5
1959	211.2	216.3	217.3	214.8	210.5	208.5	206.0	203.9	203.5	203.6	200.5	197.6
1960	196.6	195.9	196.4	195.8	196.2	197.1	196.4	195.7	197.0	198.2	195.0	193.0
1961	192.1	191.1	188.7	185.6	186.8	185.0	184.4	183.9	185.1	186.5	184.2	182.0
1962	180.1	180.3	188.7	200.2	201.9	210.8	210.3	209.4	210.0	211.7	212.9	217.9
1963	218.4	205.5	211.2	223.5	232.3	235.5	230.8	225.8	222.2	220.2	215.2	215.5
1964	218.3	219.5	217.5	214.7	210.4	210.5	209.2	207.1	206.6	206.9	204.9	206.8
1965	207.6	209.8	218.6	226.3	229.4	234.5	230.1	223.1	217.3	215.5	215.7	221.2
1966	222.2	223.7	223.9	221.2	216.6	214.2	213.9	214.3	213.1	212.7	212.2	218.8
1967	216.9	218.8	220.8	225.1	214.9	232.2	234.0	226.0	219.1	216.0	215.6	216.8
1968	218.4	216.9	219.3	219.0	214.5	212.2	211.0	208.7	207.7	207.6	206.2	207.7
1969	215.8	216.9	220.8	219.0	224.7	235.5	230.5	224.1	219.0	216.6	215.2	219.7
1970	205.1	205.1	213.6	220.1	224.0	228.2	226.2	224.3	223.8	223.4	219.0	216.9
1971	217.3	218.5	221.2	226.5	224.0	227.8	225.6	222.6	220.5	219.1	217.9	221.2
1972	222.6	224.7	224.7	222.3	218.4	221.5	221.0	219.8	218.7	218.2	217.8	221.2
1973	216.9	216.9	221.2	226.8	233.4	233.6	230.6	226.7	224.3	222.9	212.0	210.8
1974	209.0	214.1	219.8	227.4	231.4	234.6	230.0	225.2	220.3	217.8	215.8	217.1
1975	215.6	216.4	220.8	227.9	226.0	233.6	228.9	223.1	218.4	216.5	215.8	219.3
1976	218.4	217.6	215.8	213.6	209.3	206.3	204.1	202.0	201.2	199.9	196.5	193.6
1977	191.7	190.0	188.1	184.8	182.7	177.1	173.1	168.5	165.9	163.4	159.5	156.0
1978	154.0	152.5	149.8	145.3	139.7	120.9	118.9	118.9	118.9	118.9	118.9	118.9
1979	118.9	122.0	119.2	118.9	138.7	152.9	157.9	162.2	169.0	175.4	172.6	171.0
1980	201.6	208.2	218.1	225.2	227.6	234.2	231.1	224.2	218.6	216.3	215.7	217.5
1981	216.9	216.9	220.8	223.3	218.6	216.1	217.2	217.2	217.7	219.0	214.0	205.1
1982	207.7	205.1	212.0	215.5	227.8	234.0	228.7	221.3	215.6	213.1	206.1	207.3
1983	211.9	213.7	219.5	221.6	208.0	227.2	235.5	225.9	215.8	211.4	205.1	205.1
1984	205.1	206.7	215.2	223.7	231.3	232.0	228.9	224.6	221.7	220.3	217.5	221.2
1985	223.8	223.3	222.0	226.0	222.6	219.9	220.8	220.8	219.6	220.1	219.5	221.2
1986	218.6	206.0	212.4	224.5	232.4	235.0	229.8	224.9	221.8	220.0	218.4	217.9
1987	216.9	216.5	215.4	213.1	209.1	206.4	204.4	202.6	202.0	201.2	198.1	195.5
1988	194.6	193.5	191.0	188.2	187.6	184.2	182.3	180.2	179.8	179.5	177.1	174.9
1989	173.8	173.0	172.7	173.8	179.1	185.7	186.8	187.9	191.2	194.2	191.1	188.7
1990	188.5	188.9	186.3	183.5	181.1	187.5	188.1	188.8	191.0	192.7	189.2	186.1
Minimum	118.9	122.0	119.2	118.9	138.7	120.9	118.9	118.9	118.9	118.9	118.9	118.9
Maximum	223.8	225.9	229.8	235.5	235.5	235.5	235.5	227.8	226.0	226.6	223.9	221.2
Average	208.1	208.1	210.4	213.1	214.7	218.0	216.0	213.2	211.5	210.8	208.2	207.8

## Total Camanche Releases in CFS

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1921	691	773	710	288	1,397	1,935	824	722	588	500	356	300
1922	189	307	195	282	2,997	2,557	933	831	696	602	360	428
1923	511	459	200	278	944	1,201	795	693	559	453	373	300
1924	85	74	171	210	441	309	200	200	100	150	253	214
1925	200	200	201	278	740	996	591	489	355	328	356	300
1926	201	200	200	278	603	371	402	352	237	178	256	220
1927	200	201	216	584	1,523	1,894	909	807	673	513	420	300
1928	201	200	1,444	278	725	912	509	408	271	247	368	300
1929	201	200	184	210	572	312	318	266	190	150	256	220
1930	94	92	201	208	472	368	295	294	177	178	256	220
1931	93	92	177	210	113	309	174	188	96	96	153	139
1932	116	108	135	173	603	371	402	352	237	178	256	220
1933	200	200	200	278	603	371	402	352	237	178	256	220
1934	93	92	171	210	441	309	211	207	105	150	253	214
1935	200	200	201	278	603	371	402	352	237	178	256	220
1936	204	2,488	533	641	1,708	1,538	904	801	666	529	360	304
1937	201	182	798	278	981	1,237	832	730	596	445	356	1,247
1938	244	1,407	1,785	2,449	5,025	2,294	1,070	965	823	639	393	344
1939	201	182	184	280	572	312	318	266	190	150	256	220
1940	200	200	1,124	278	1,794	1,151	746	644	510	478	356	300
1941	563	913	680	288	1,346	1,682	971	869	735	493	356	474
1942	1,397	1,071	202	296	2,433	2,080	1,042	939	802	585	573	463
1943	1,559	1,043	1,883	774	1,744	1,279	874	771	634	500	369	314
1944	185	182	185	278	603	371	402	352	237	178	256	220
1945	230	1,552	200	278	1,027	1,283	878	776	642	482	531	1,111
1946	642	224	200	278	1,189	1,125	720	618	484	465	356	300
1947	226	198	200	278	603	371	402	352	237	178	256	220
1948	183	200	200	278	661	903	495	410	284	318	256	220
1949	200	200	200	278	603	371	402	352	237	178	256	220
1950	243	818	339	410	1,117	1,408	961	856	715	521	3,393	4,168
1951	1,343	1,129	442	354	781	1,038	632	530	396	431	356	841
1952	1,432	1,321	1,145	3,119	3,219	1,960	1,310	1,203	1,059	664	406	359
1953	309	1,296	185	278	838	1,094	689	587	453	429	356	300
1954	201	200	200	360	658	912	509	408	271	247	356	300
1955	201	182	200	278	603	371	402	352	237	178	256	2,260
1956	3,079	1,027	312	396	2,269	1,920	1,058	954	815	616	378	326
1957	185	182	185	278	771	1,025	622	521	384	429	356	300
1958	363	1,264	1,041	1,940	2,678	1,979	1,150	1,045	906	617	382	330
1959	201	182	185	278	603	371	402	352	237	178	256	220
1960	93	92	102	208	472	368	295	294	152	178	256	149
1961	92	92	177	210	113	309	211	207	105	96	153	139
1962	116	108	135	173	603	371	402	352	237	178	256	220
1963	220	2,394	204	284	2,023	1,445	957	855	720	556	659	304
1964	185	182	200	278	603	371	402	352	237	178	256	2,601
1965	2,309	900	215	600	1,372	1,585	1,180	1,077	940	541	595	316
1966	325	182	200	278	603	371	402	352	237	178	256	220
1967	781	559	940	1,231	3,267	1,752	1,347	1,242	1,103	668	382	330
1968	185	330	185	278	603	371	402	352	237	178	256	220
1969	1,350	1,678	857	2,421	3,521	1,883	1,235	1,128	985	683	401	354
1970	3,467	1,109	548	285	781	1,038	633	531	395	400	637	802
1971	722	655	567	278	897	1,153	748	646	512	434	356	389
1972	216	182	185	278	603	371	402	352	237	178	256	234
1973	1,124	1,293	648	278	937	1,193	788	686	552	472	1,354	909
1974	1,395	285	958	737	1,350	1,463	1,057	955	821	547	356	300
1975	185	182	441	278	1,302	1,558	1,153	1,051	917	556	356	300
1976	102	92	172	210	441	309	200	200	100	150	253	214
1977	139	140	135	213	113	309	174	188	96	96	153	98
1978	56	48	70	108	113	309	174	188	96	96	153	98
1979	56	48	71	106	144	368	295	294	152	134	153	98
1980	116	1,815	573	324	1,435	1,553	1,147	1,045	911	531	356	300
1981	201	206	186	278	603	371	402	352	237	178	727	1,679
1982	1,379	3,001	1,817	3,587	2,877	1,797	1,393	1,284	1,136	776	1,382	1,690
1983	1,456	2,319	3,464	1,843	4,352	3,712	1,872	1,760	1,612	944	2,331	2,776
1984	1,495	1,081	424	278	1,012	1,268	863	761	627	484	584	300
1985	185	227	185	278	603	371	402	352	237	178	267	310
1986	567	5,905	2,410	466	1,783	1,395	991	885	742	571	399	350
1987	108	74	156	210	441	309	211	207	105	150	253	214
1988	93	92	178	210	113	309	174	188	96	96	153	139
1989	56	48	71	106	472	368	295	294	152	178	253	157
1990	94	94	188	210	438	309	211	207	105	150	253	214

Minimum	56	48	70	106	113	309	174	188	96	96	153	98
Maximum	3,467	5,905	3,464	3,587	4,352	3,712	1,872	1,760	1,612	944	3,393	4,168
Average	513	664	484	503	1,120	990	651	583	459	353	433	509

92 229 10-9995-WSIP

Composite Program IV - GFS Eqn for Maint. of Camanche Hypol

Fish Releases per Production Goal Faxed 1-2-92 w/Ramping

Drought Planning Sequence - 1976-1977-185 TAF

## Flow at Victor (Bruella Rd) CFS

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1921	654	736	665	233	1,190	1,686	570	519	428	376	337	274
1922	167	269	166	235	2,789	2,306	678	627	535	477	339	386
1923	473	423	172	231	738	951	541	491	399	329	337	274
1924	172	163	171	178	406	220	163	165	73	126	237	195
1925	178	181	173	231	533	747	337	286	195	204	337	274
1926	180	181	172	231	533	283	317	286	195	154	237	195
1927	178	182	188	538	1,116	1,645	655	605	513	389	384	274
1928	180	181	1,400	231	533	747	337	286	195	204	349	274
1929	180	181	156	178	502	224	233	200	147	126	237	195
1930	180	181	173	176	437	280	259	259	151	154	237	195
1931	180	181	171	178	78	220	138	153	70	77	137	120
1932	95	89	107	126	533	283	317	286	195	154	237	195
1933	178	181	172	231	533	283	317	286	195	154	237	195
1934	180	181	171	178	406	220	175	173	79	126	237	195
1935	178	181	173	231	533	283	317	286	195	154	237	195
1936	182	2,450	487	508	1,500	1,287	648	597	505	403	340	278
1937	180	163	754	231	774	988	578	528	436	321	337	1,205
1938	209	1,359	1,726	2,303	2,802	2,028	799	746	649	504	363	305
1939	180	163	156	233	502	224	233	200	147	126	237	195
1940	178	181	1,096	231	1,587	902	492	442	350	354	337	274
1941	526	877	636	231	1,140	1,433	717	666	575	369	337	432
1942	1,355	1,030	169	244	2,221	1,824	781	730	636	457	533	417
1943	1,518	1,003	1,834	638	1,532	1,024	614	563	469	373	346	285
1944	164	163	157	231	533	283	317	286	195	154	237	195
1945	209	1,516	172	231	820	1,034	624	574	482	358	495	1,069
1946	604	187	172	231	982	876	466	416	324	341	337	274
1947	189	179	172	231	533	283	317	286	195	154	237	195
1948	162	181	172	231	533	747	337	286	195	204	237	195
1949	178	181	172	231	533	283	317	286	195	154	237	195
1950	210	770	281	265	895	1,143	691	638	541	387	3,347	4,114
1951	1,305	1,093	398	231	575	788	378	328	236	306	337	799
1952	1,377	1,269	1,081	2,968	2,991	1,687	1,033	979	880	526	372	316
1953	288	1,259	157	231	631	845	435	384	293	305	337	274
1954	180	163	172	231	533	747	337	286	195	204	337	274
1955	180	163	172	231	533	283	317	286	195	154	237	2,219
1956	3,033	983	259	256	2,053	1,660	794	742	647	485	352	293
1957	164	163	157	231	610	823	413	363	271	305	337	274
1958	332	1,219	987	1,799	2,460	1,717	884	832	736	486	355	296
1959	180	163	157	231	533	283	317	286	195	154	237	195
1960	180	181	172	176	437	280	259	259	126	154	237	199
1961	178	181	170	178	78	220	175	173	79	77	137	120
1962	95	89	107	126	533	283	317	286	195	154	237	195
1963	182	2,357	175	236	1,814	1,194	702	651	559	431	622	277
1964	164	163	172	231	533	283	317	286	195	154	237	2,559
1965	2,267	860	182	465	1,161	1,330	920	869	776	413	555	283
1966	288	163	172	231	533	283	317	286	195	154	237	195
1967	735	514	886	1,090	3,049	1,490	1,081	1,029	933	537	355	296
1968	164	311	157	231	533	283	317	286	195	154	237	195
1969	1,296	1,627	795	2,272	3,294	1,612	960	906	808	547	368	312
1970	3,428	1,071	502	236	573	786	377	326	233	275	599	759
1971	684	618	522	231	690	904	494	443	352	310	337	347
1972	178	163	157	231	533	283	317	286	195	154	237	209
1973	1,086	1,256	604	231	730	944	534	484	392	348	1,318	867
1974	1,358	248	914	606	1,143	1,213	803	753	661	423	337	274
1975	164	163	408	231	1,095	1,309	899	848	757	432	337	274
1976	188	181	165	178	406	220	163	165	73	126	237	195
1977	178	181	165	181	78	220	138	153	70	77	137	120
1978	95	89	99	76	78	220	138	153	70	77	137	120
1979	95	89	100	74	109	280	259	259	126	114	137	120
1980	95	1,778	529	231	1,228	1,303	893	843	751	407	337	274
1981	180	188	158	231	533	283	317	286	195	154	708	1,654
1982	1,317	2,942	1,745	3,427	2,640	1,515	1,106	1,051	950	633	1,325	1,624
1983	1,394	2,261	3,393	1,683	4,115	3,431	1,586	1,528	1,426	801	2,274	2,710
1984	1,458	1,045	380	231	805	1,019	609	558	467	360	548	274
1985	164	208	157	231	533	283	317	286	195	154	248	285
1986	531	5,855	2,349	318	1,558	1,126	717	664	566	436	367	310
1987	195	163	156	178	406	220	175	173	79	126	237	195
1988	180	181	172	178	78	220	138	153	70	77	137	120
1989	95	89	100	74	437	280	259	259	126	154	237	195
1990	180	182	181	178	403	220	175	173	79	130	237	195
Minimum	95	89	99	74	78	220	138	153	70	77	137	120
Maximum	3,428	5,855	3,393	3,427	4,115	3,431	1,586	1,528	1,426	801	3,347	4,114
Average	503	654	455	437	983	816	485	450	357	276	409	482

92 229 10-9995-WSIP  
 Composite Program IV - GFS Eqn for Maint. of Camanche Hypol  
 Fish Releases per Production Goal Faxed 1-2-92 w/Ramping  
 Drought Planning Sequence - 1976-1977-185 TAF

Flow Below Lodi Lake in CFS

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1921	608	696	608	125	1,005	1,436	281	254	252	281	299	228
1922	118	227	105	124	2,600	2,053	386	358	356	380	299	337
1923	427	383	114	124	552	701	253	225	223	233	299	228
1924	126	123	114	124	348	30	43	31	22	68	199	149
1925	133	141	115	124	348	497	48	21	19	109	299	228
1926	134	141	114	124	348	33	29	21	19	59	199	149
1927	133	142	130	430	931	1,395	366	339	337	294	346	228
1928	134	141	1,342	124	348	497	48	21	19	109	312	228
1929	134	141	99	124	348	33	29	21	19	68	199	149
1930	135	141	115	122	348	30	29	21	19	59	199	149
1931	134	141	114	124	21	30	18	19	19	19	99	74
1932	49	49	49	19	348	33	29	21	19	59	199	149
1933	133	141	114	124	348	33	29	21	19	59	199	149
1934	134	141	114	124	348	30	29	21	19	68	199	149
1935	133	141	115	124	348	33	29	21	19	59	199	149
1936	133	2,407	426	397	1,310	1,033	354	327	325	305	299	228
1937	134	123	696	124	589	738	289	262	260	226	299	1,159
1938	133	1,291	1,635	2,159	2,579	1,738	470	442	440	385	299	228
1939	134	123	99	124	348	33	29	21	19	68	199	149
1940	133	141	1,038	124	1,402	652	203	176	174	258	299	228
1941	480	837	578	124	954	1,183	428	401	399	273	299	386
1942	1,298	980	99	124	2,021	1,560	478	451	449	353	486	360
1943	1,461	954	1,765	519	1,333	761	312	285	282	269	299	228
1944	118	123	99	124	348	33	29	21	19	59	199	149
1945	164	1,475	114	124	635	784	335	308	306	263	457	1,023
1946	559	147	114	124	797	626	177	150	148	246	299	228
1947	143	139	114	124	348	33	29	21	19	59	199	149
1948	116	141	114	124	348	497	48	21	19	109	199	149
1949	133	141	114	124	348	33	29	21	19	59	199	149
1950	135	705	192	124	675	856	364	337	335	270	3,285	4,040
1951	1,260	1,053	340	124	389	538	90	62	60	211	299	753
1952	1,290	1,192	979	2,812	2,754	1,384	690	662	660	399	299	228
1953	242	1,219	99	124	446	595	146	119	117	209	299	228
1954	134	123	114	124	348	497	48	21	19	109	299	228
1955	134	123	114	124	348	33	29	21	19	59	199	2,173
1956	2,969	927	181	127	1,845	1,387	481	453	451	376	299	228
1957	118	123	99	124	424	573	125	98	95	209	299	228
1958	265	1,160	906	1,667	2,248	1,440	567	540	538	374	299	228
1959	134	123	99	124	348	33	29	21	19	59	199	149
1960	134	141	114	122	348	30	29	21	19	59	199	154
1961	133	141	114	124	21	30	29	21	19	19	99	74
1962	49	49	49	19	348	33	29	21	19	59	199	149
1963	133	2,314	114	124	1,625	940	409	382	379	333	582	228
1964	118	123	114	124	348	33	29	21	19	59	199	2,513
1965	2,211	811	114	346	963	1,067	619	592	589	310	509	227
1966	242	123	114	124	348	33	29	21	19	59	199	149
1967	668	456	805	958	2,837	1,213	764	737	735	425	299	228
1968	118	271	99	124	348	33	29	21	19	59	199	149
1969	1,213	1,554	697	2,120	3,063	1,314	622	595	592	422	299	229
1970	3,378	1,027	440	124	382	531	82	55	53	177	558	709
1971	639	578	465	124	505	654	205	178	176	215	299	301
1972	133	123	99	124	348	33	29	21	19	59	199	163
1973	1,041	1,216	546	124	545	694	245	218	216	253	1,280	821
1974	1,312	208	856	499	958	963	515	487	485	328	299	228
1975	118	123	350	124	910	1,059	610	583	581	337	299	228
1976	142	141	108	124	348	30	43	31	22	68	199	149
1977	133	141	115	124	21	30	18	19	19	19	99	74
1978	49	49	49	19	21	30	18	19	19	19	99	74
1979	49	49	49	19	19	23	30	29	21	19	99	74
1980	49	1,738	471	124	1,043	1,053	605	577	575	312	299	228
1981	134	148	100	124	348	33	29	21	19	59	670	1,608
1982	1,214	2,851	1,625	3,253	2,384	1,191	742	715	713	493	1,239	1,520
1983	1,291	2,169	3,273	1,509	3,859	3,106	1,221	1,192	1,189	661	2,188	2,606
1984	1,412	1,005	322	124	620	769	320	293	291	265	510	228
1985	118	168	99	124	348	33	29	21	19	59	210	239
1986	450	5,783	2,253	169	1,329	831	382	355	352	313	299	228
1987	149	123	99	124	348	30	29	21	19	68	199	149
1988	134	141	115	124	21	30	18	19	19	19	99	74
1989	49	49	49	19	348	30	29	21	19	59	199	149
1990	134	142	125	124	346	30	29	21	19	72	199	149
Minimum	49	49	49	19	21	30	18	19	19	19	99	74
Maximum	3,378	5,783	3,273	3,253	3,859	3,106	1,221	1,192	1,189	661	3,285	4,040
Average	452	609	392	334	815	569	218	200	197	183	367	431

92 229 10-9995-WSIP

Composite Program IV - GFS Eqn for Maint. of Camanche Hypol

Fish Releases per Production Goal Faxed 1-2-92 w/Ramping

Drought Planning Sequence - 1976-1977-185 TAF

## Flow into the Delta in CFS

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1921	601	689	599	112	982	1,405	252	232	237	270	291	219
1922	110	219	96	110	2,577	2,022	356	337	342	370	291	327
1923	420	375	105	110	529	671	223	204	209	223	291	219
1924	119	115	105	110	325	0	25	16	12	58	191	140
1925	125	133	106	110	325	466	19	0	4	99	291	219
1926	127	133	105	110	325	3	0	0	4	49	191	140
1927	125	134	121	417	908	1,364	337	318	322	284	338	219
1928	127	133	1,333	110	325	466	19	0	4	99	303	219
1929	127	133	90	110	325	3	0	0	4	58	191	140
1930	127	133	106	110	325	0	0	0	4	49	191	140
1931	126	133	105	110	0	0	0	4	8	9	91	65
1932	42	42	40	5	325	3	0	0	4	49	191	140
1933	125	133	105	110	325	3	0	0	4	49	191	140
1934	127	133	105	110	325	0	0	0	4	58	191	140
1935	125	133	106	110	325	3	0	0	4	49	191	140
1936	125	2,399	417	383	1,287	1,002	325	306	310	295	291	219
1937	127	115	687	110	566	707	260	241	245	216	291	1,150
1938	125	1,284	1,626	2,146	2,556	1,707	440	421	426	375	291	219
1939	127	115	90	110	325	3	0	0	4	58	191	140
1940	125	133	1,029	110	1,379	621	174	155	159	248	291	219
1941	473	829	569	110	931	1,152	399	379	384	263	291	377
1942	1,291	972	90	110	1,998	1,529	449	430	434	343	478	350
1943	1,454	946	1,756	505	1,310	730	283	263	268	259	291	219
1944	110	115	90	110	325	3	0	0	4	49	191	140
1945	156	1,468	105	110	612	754	306	287	291	252	449	1,014
1946	551	140	105	110	774	595	148	129	133	236	291	219
1947	135	131	105	110	325	3	0	0	4	49	191	140
1948	109	133	105	110	325	466	19	0	4	99	191	140
1949	125	133	105	110	325	3	0	0	4	49	191	140
1950	128	697	183	110	652	825	335	316	320	259	3,277	4,030
1951	1,252	1,045	331	110	366	508	60	41	46	201	291	744
1952	1,282	1,184	970	2,799	2,731	1,353	660	641	646	388	291	219
1953	234	1,212	90	110	423	564	117	97	102	199	291	219
1954	127	115	105	110	325	466	19	0	4	99	291	219
1955	127	115	105	110	325	3	0	0	4	49	191	2,163
1956	2,961	919	172	114	1,822	1,356	451	432	437	365	291	219
1957	110	115	90	110	401	543	95	76	81	199	291	219
1958	258	1,153	897	1,653	2,225	1,409	538	519	523	364	291	219
1959	127	115	90	110	325	3	0	0	4	49	191	140
1960	127	133	105	110	325	0	0	0	4	49	191	144
1961	125	133	105	110	0	0	0	0	4	9	91	65
1962	42	42	40	5	325	3	0	0	4	49	191	140
1963	125	2,306	105	111	1,602	909	380	360	365	323	573	219
1964	110	115	105	110	325	3	0	0	4	49	191	2,504
1965	2,204	803	105	332	940	1,037	589	570	575	300	501	218
1966	235	115	105	110	325	3	0	0	4	49	191	140
1967	660	448	796	944	2,814	1,182	735	716	720	415	291	219
1968	110	263	90	110	325	3	0	0	4	49	191	140
1969	1,206	1,546	688	2,107	3,040	1,283	592	573	578	412	291	219
1970	3,371	1,020	431	110	359	501	53	34	38	166	550	699
1971	631	570	456	110	482	623	176	157	161	204	291	292
1972	125	116	91	110	325	3	0	0	4	49	191	154
1973	1,033	1,208	537	110	522	663	216	197	201	243	1,272	812
1974	1,304	201	847	485	935	933	485	466	471	318	291	219
1975	110	115	341	110	887	1,028	581	562	566	327	291	219
1976	135	133	99	110	325	0	25	16	12	58	191	140
1977	125	133	106	110	0	0	0	4	8	9	91	65
1978	42	42	40	5	0	0	0	4	8	9	91	65
1979	42	42	40	5	0	0	0	0	4	9	91	65
1980	42	1,731	463	110	1,020	1,023	575	556	561	301	291	219
1981	127	140	91	110	325	3	0	0	4	49	662	1,598
1982	1,207	2,844	1,616	3,239	2,361	1,160	713	693	698	483	1,231	1,511
1983	1,283	2,162	3,264	1,495	3,836	3,076	1,192	1,170	1,175	651	2,180	2,597
1984	1,404	997	313	110	597	738	291	271	276	255	502	219
1985	110	160	90	110	325	3	0	0	4	49	202	229
1986	442	5,775	2,244	156	1,306	800	353	333	338	303	291	219
1987	141	115	90	110	325	0	0	0	4	58	191	140
1988	127	133	106	110	0	0	0	4	8	9	91	65
1989	42	42	40	5	325	0	0	0	4	49	191	140
1990	127	135	116	110	325	0	0	0	4	62	191	140
Minimum	42	42	40	5	0	0	0	0	4	9	91	65
Maximum	3,371	5,775	3,264	3,239	3,836	3,076	1,192	1,170	1,175	651	3,277	4,030
Average	444	601	383	320	793	538	190	179	183	173	359	421

92 229 10-9983-WSIP  
 Composite Program V - GFS Eqn for Maint. of Camanche Hypoli  
 Fish Releases per Production Goal Faxed 1-2-92 w/Ramping  
 FLOPLD RINC TNF PRECP EVAP FOR 185 TAF Runoff USED FOR 1978

Pardee Reservoir Storage in Acre-Feet

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1921	327,270	302,880	294,300	273,623	359,985	359,995	345,819	339,781	336,811	338,019	338,813	332,684
1922	333,277	324,542	299,588	316,334	359,985	359,995	349,514	340,680	335,288	336,329	335,005	332,684
1923	343,372	337,649	339,621	359,995	359,985	359,995	352,018	342,629	334,516	331,720	335,164	332,684
1924	343,853	335,967	327,903	329,083	311,948	289,467	266,969	244,664	224,089	210,179	206,369	205,241
1925	212,114	273,632	313,948	359,995	359,985	359,995	341,143	319,567	300,752	285,503	295,289	306,944
1926	320,002	329,631	329,715	343,578	352,781	344,289	328,718	318,196	308,393	304,105	320,789	332,684
1927	347,298	359,960	359,985	359,995	359,985	359,995	350,115	338,205	326,517	319,306	327,269	332,684
1928	338,982	338,995	359,985	359,995	359,985	357,960	347,109	334,662	323,600	316,153	327,239	324,086
1929	318,589	314,598	316,639	327,449	326,031	318,778	313,833	307,877	301,726	299,404	307,720	313,970
1930	321,818	321,086	340,237	348,012	338,928	348,724	328,372	308,583	289,710	274,412	285,353	288,975
1931	281,583	274,231	273,651	270,973	251,008	224,397	202,315	174,193	145,670	119,490	115,767	120,297
1932	123,962	141,022	157,150	197,142	243,326	359,995	353,472	334,170	314,777	297,566	307,212	318,945
1933	320,781	304,462	309,214	337,015	338,813	336,834	319,875	300,215	279,977	263,705	275,348	298,228
1934	312,467	315,797	338,447	335,589	306,678	291,408	270,499	238,500	207,453	176,874	179,173	180,784
1935	186,244	203,899	224,004	313,079	334,939	359,995	334,331	305,670	278,226	256,149	267,327	279,667
1936	311,288	359,960	358,965	359,995	359,985	359,995	349,232	340,396	331,532	326,388	331,505	332,684
1937	333,485	359,960	359,985	359,995	359,985	359,995	344,359	338,858	333,269	331,986	332,557	332,684
1938	341,221	359,960	359,985	359,995	359,985	359,995	359,985	342,757	323,753	308,820	320,280	332,684
1939	348,052	341,044	347,070	354,958	341,860	337,697	329,847	321,611	314,206	312,220	314,062	308,879
1940	342,212	359,960	359,985	359,995	359,985	359,995	343,045	334,774	326,002	322,419	327,480	332,684
1941	345,005	359,960	359,985	359,995	359,985	359,995	350,189	344,801	340,183	339,542	339,985	332,684
1942	359,985	359,960	337,474	346,241	359,985	359,995	359,272	352,608	345,301	340,270	349,962	332,684
1943	359,985	357,248	359,985	359,995	359,985	359,995	348,876	343,536	336,477	334,981	338,447	332,684
1944	343,019	342,046	358,044	359,995	359,985	332,968	321,087	313,125	303,647	298,977	318,065	332,684
1945	334,613	359,960	359,985	346,326	359,985	359,995	339,154	331,213	324,658	323,260	325,537	332,684
1946	331,052	309,665	294,760	281,303	359,985	357,572	342,355	335,959	333,202	336,020	342,860	332,684
1947	330,236	330,218	340,697	345,898	343,938	342,266	335,601	329,670	324,565	328,614	329,449	323,950
1948	338,328	329,702	333,611	359,995	351,115	359,995	345,842	331,582	316,693	304,048	314,871	329,016
1949	335,321	327,533	340,513	351,193	359,985	350,645	340,888	333,651	326,805	322,912	330,405	332,684
1950	354,884	359,960	359,985	359,995	359,985	359,995	346,151	338,126	330,910	329,337	359,995	359,985
1951	359,985	359,960	359,985	359,995	359,985	359,995	340,811	334,299	328,227	323,201	324,668	332,684
1952	359,985	359,960	359,985	359,995	359,985	359,995	359,985	347,530	331,694	317,831	326,849	332,684
1953	359,985	348,119	359,985	359,995	359,985	359,995	356,805	348,046	341,422	341,474	346,402	332,684
1954	347,543	359,960	359,985	359,995	359,985	359,995	340,063	334,420	334,939	339,000	346,244	332,684
1955	340,187	335,266	349,573	358,559	359,985	359,995	343,728	336,764	329,489	325,656	329,802	359,985
1956	359,985	359,960	359,985	359,995	359,985	359,995	352,865	345,123	336,437	335,959	343,000	332,684
1957	345,298	359,960	359,985	357,254	359,985	359,995	340,590	324,965	311,874	308,619	323,475	332,684
1958	356,905	359,960	359,985	359,995	359,985	359,995	359,985	352,701	351,764	354,135	332,684	332,684
1959	349,072	359,960	359,985	359,995	344,855	333,458	322,251	311,472	300,891	293,756	300,472	308,210
1960	305,573	315,266	324,945	335,047	340,921	342,519	319,856	298,029	276,646	257,643	265,002	272,752
1961	275,021	268,145	266,371	266,750	245,778	233,017	219,797	205,692	192,501	179,516	178,255	175,705
1962	172,592	208,633	229,853	264,894	280,464	341,100	324,569	306,429	286,597	276,140	290,492	305,033
1963	326,311	359,960	357,030	359,995	359,985	359,995	345,402	331,362	316,678	306,303	321,174	332,684
1964	345,855	336,994	348,283	358,400	350,103	335,336	323,165	315,622	309,083	307,416	323,223	359,985
1965	359,985	359,960	355,488	359,995	359,985	359,995	344,052	340,756	355,804	359,985	359,995	332,684
1966	326,446	306,968	313,044	343,042	353,173	343,695	322,008	313,879	313,708	312,861	317,538	332,684
1967	359,985	346,853	359,985	359,995	359,985	359,995	359,985	355,965	351,657	350,892	354,112	332,684
1968	346,744	359,802	359,985	359,995	351,134	349,748	331,950	323,069	316,517	312,721	324,188	332,684
1969	359,985	359,960	359,985	359,995	359,985	359,995	359,985	359,985	358,421	359,985	356,158	332,684
1970	359,985	359,960	359,985	348,578	359,985	359,995	347,448	337,198	327,299	322,215	344,934	359,985
1971	358,445	349,065	358,580	355,300	357,086	359,995	356,007	359,985	359,995	359,985	354,485	332,684
1972	323,666	307,941	334,309	359,995	359,985	359,995	343,905	336,715	334,423	337,618	342,327	332,684
1973	359,985	359,960	359,985	358,438	359,985	359,995	347,939	339,450	334,334	336,331	355,534	359,985
1974	359,985	352,422	359,985	359,995	359,985	359,995	359,985	359,985	359,995	358,977	354,232	332,684
1975	335,428	352,405	359,985	354,135	359,985	359,995	358,561	359,985	359,995	359,985	359,995	332,684
1976	336,826	326,279	319,663	315,149	297,046	277,031	255,559	235,482	216,186	193,968	182,844	167,551
1977	157,848	142,089	130,445	126,492	124,658	120,883	116,893	112,748	110,183	101,185	94,328	81,191
1978	70,350	73,778	87,027	80,969	75,492	44,724	36,445	27,605	28,409	28,252	19,541	16,800
1979	22,504	38,090	87,426	135,276	174,740	202,052	182,639	150,023	121,418	104,154	123,399	151,328
1980	302,483	359,960	359,985	359,995	359,985	359,995	359,985	359,985	348,877	337,264	328,574	331,796
1981	357,655	359,960	359,985	359,995	351,911	343,568	329,649	316,438	306,370	304,045	324,890	359,985
1982	359,985	359,960	359,985	359,995	359,985	359,995	359,985	359,985	359,985	351,231	349,675	359,995
1983	359,985	359,960	359,985	359,995	359,985	359,995	359,985	359,985	359,995	359,985	359,995	359,985
1984	359,985	359,960	359,985	359,995	359,985	359,995	359,986	359,985	359,985	352,677	351,987	359,995
1985	315,574	317,750	351,682	359,995	352,125	346,869	328,362	323,511	322,165	326,221	336,148	332,684
1986	349,991	359,960	359,985	359,995	359,985	359,995	351,007	343,557	337,124	332,799	339,593	332,684
1987	337,028	334,463	342,354	342,955	320,476	301,943	292,702	283,122	271,487	249,263	240,291	237,130
1988	240,301	232,100	228,848	231,119	213,255	199,047	184,825	166,427	146,043	119,493	112,368	105,810
1989	99,181	93,562	140,101	203,415	259,245	279,167	262,450	242,814	226,244	200,201	218,040	232,556
1990												

92 229 10-9983-WSIP

Composite Program V - GFS Eqn for Maint. of Camanche Hypoli

Fish Releases per Production Goal Faxed 1-2-92 w/Ramping

FLOPLD RINC TNF PRECP EVAP FOR 185 TAF Runoff USED FOR 1978

## Pardee Reservoir Elevation in Feet

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1921	615	605	602	594	628	628	622	620	619	619	619	617
1922	617	614	604	610	628	628	624	620	618	618	618	617
1923	621	619	620	628	628	628	625	621	618	617	618	617
1924	622	618	615	616	609	600	591	582	574	568	566	566
1925	569	594	609	628	628	628	620	612	604	598	602	607
1926	612	616	616	621	625	622	615	611	607	606	612	617
1927	623	628	628	628	628	628	624	619	614	612	615	617
1928	620	620	628	628	628	628	623	618	613	610	615	613
1929	611	610	611	615	614	611	609	607	605	604	607	609
1930	613	612	620	623	620	624	615	607	600	594	598	600
1931	597	594	594	593	585	574	564	551	535	519	517	520
1932	522	533	542	562	582	628	626	618	610	603	607	611
1933	612	606	608	619	619	619	612	604	596	590	594	603
1934	609	610	619	618	607	601	593	580	567	552	553	554
1935	557	565	574	609	618	628	618	606	596	587	591	596
1936	608	628	628	628	628	628	624	620	617	614	616	617
1937	617	628	628	628	628	628	622	620	617	617	617	617
1938	620	628	628	628	628	628	628	621	613	607	612	617
1939	623	620	623	626	621	619	616	613	610	609	610	607
1940	621	628	628	628	628	628	621	618	614	613	615	617
1941	622	628	628	628	628	628	624	622	620	620	620	617
1942	628	619	623	628	628	628	628	625	622	620	624	617
1943	628	627	628	628	628	628	624	621	619	618	619	617
1944	621	621	628	628	628	617	612	609	605	604	611	617
1945	618	628	628	623	628	628	620	616	614	613	614	617
1946	616	608	602	597	628	627	621	618	617	618	621	617
1947	616	616	620	622	622	621	618	616	614	615	616	613
1948	619	616	617	628	625	628	622	617	611	606	610	615
1949	618	615	620	625	628	624	620	617	615	613	616	617
1950	626	628	628	628	628	628	623	619	616	616	628	628
1951	628	628	628	628	628	628	620	618	615	613	614	617
1952	628	628	628	628	628	628	628	623	617	611	615	617
1953	628	623	628	628	628	628	627	623	621	621	623	617
1954	623	628	628	628	628	628	620	618	618	620	623	617
1955	620	618	624	628	628	628	622	619	616	614	616	628
1956	628	628	628	628	628	628	625	622	619	618	621	617
1957	622	628	628	627	628	628	620	614	609	607	613	617
1958	627	628	628	628	628	628	628	628	625	625	626	617
1959	624	628	628	628	622	617	613	608	604	602	604	607
1960	606	610	614	618	620	621	612	603	595	587	590	593
1961	594	592	591	591	583	578	572	566	560	553	553	552
1962	550	567	576	590	596	620	614	607	599	595	600	606
1963	614	628	627	628	628	628	622	616	611	606	612	617
1964	622	619	623	628	624	618	613	610	608	607	613	628
1965	628	628	626	628	628	628	622	620	627	628	628	617
1966	614	607	609	621	626	622	613	609	609	609	611	617
1967	628	623	628	628	628	628	628	627	625	625	626	617
1968	623	628	628	628	625	624	617	613	610	609	614	617
1969	628	628	628	628	628	628	628	628	628	628	627	617
1970	628	628	624	628	628	628	623	619	615	613	622	628
1971	628	624	628	626	627	628	627	628	628	628	626	617
1972	613	607	618	628	628	628	622	619	618	619	621	617
1973	628	628	628	628	628	628	623	620	618	618	627	628
1974	628	625	628	628	628	628	628	628	628	628	626	617
1975	618	625	628	626	628	628	628	628	628	628	628	617
1976	619	614	612	610	603	595	587	579	570	560	555	547
1977	542	533	526	524	523	520	518	515	513	507	502	491
1978	481	484	496	491	486	452	440	423	425	424	404	397
1979	412	442	496	529	551	564	555	538	521	509	522	539
1980	605	628	628	628	628	628	628	624	619	615	617	617
1981	627	628	628	628	625	621	616	610	606	606	614	628
1982	628	628	628	628	628	628	628	628	625	624	628	628
1983	628	628	628	628	628	628	628	628	628	628	628	628
1984	628	628	628	628	628	628	626	628	625	625	628	617
1985	610	611	625	628	625	623	615	613	613	614	618	617
1986	624	628	628	628	628	628	625	621	619	617	620	617
1987	619	618	621	621	612	605	601	597	593	584	581	579
1988	581	577	576	577	569	563	556	547	536	519	515	510
1989	505	501	532	565	588	596	589	582	575	563	571	577
1990	584	586	592	595	591	587	582	576	569	563	558	554

Minimum	412	442	496	491	486	452	440	423	425	424	404	397
Maximum	628	628	628	628	628	628	628	628	628	628	628	628
Average	607	609	612	615	617	616	611	607	603	600	602	602

## Total Pardee Releases in CFS

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1921	1,001	1,013	1,032	1,051	1,128	2,563	356	194	162	157	144	350
1922	289	701	985	439	1,921	4,240	512	257	192	185	272	745
1923	415	524	307	526	1,598	1,375	384	251	260	251	109	234
1924	0	0	0	0	219	227	219	219	227	219	0	0
1925	0	0	0	197	2,486	1,687	431	431	445	431	0	0
1926	0	0	0	0	256	264	335	256	264	256	60	93
1927	161	847	634	988	1,983	2,655	392	301	311	301	83	163
1928	146	86	859	1,007	2,320	301	292	292	301	292	0	0
1929	7	0	0	0	203	210	203	203	210	203	0	0
1930	0	0	0	128	433	717	433	433	448	433	0	0
1931	0	0	0	0	351	363	351	351	363	351	0	0
1932	119	268	355	52	442	769	442	442	457	442	0	0
1933	0	66	0	0	495	511	495	495	511	495	0	0
1934	126	0	0	0	463	479	463	463	479	463	0	0
1935	0	0	0	0	926	1,643	559	559	578	559	0	0
1936	0	1,274	968	1,039	2,691	1,957	401	283	292	283	102	225
1937	54	208	1,056	1,057	1,713	1,460	437	227	223	216	188	478
1938	236	948	2,084	1,571	4,749	3,961	591	465	480	465	45	50
1939	11	27	0	0	229	237	229	229	237	229	0	0
1940	0	843	1,465	1,154	3,138	1,060	421	268	277	268	133	326
1941	324	583	1,048	1,024	1,798	2,279	459	235	221	214	207	542
1942	655	972	978	985	2,449	3,512	566	279	284	275	277	734
1943	766	969	2,090	2,085	2,813	1,433	430	265	274	265	145	341
1944	0	0	109	141	494	872	334	232	260	232	62	106
1945	288	784	688	969	1,393	2,029	529	264	238	230	267	724
1946	732	808	947	1,046	1,268	968	401	212	170	164	184	453
1947	279	195	0	357	213	189	208	183	189	183	0	0
1948	0	0	0	201	972	2,272	380	380	393	380	5	0
1949	77	2	57	638	965	960	334	234	242	234	72	124
1950	0	661	752	1,191	1,520	2,055	410	264	273	264	2,093	4,072
1951	1,247	1,099	1,113	1,681	2,018	531	508	255	253	245	239	643
1952	843	1,268	1,348	1,805	4,325	3,976	1,065	473	489	473	119	281
1953	349	549	358	966	823	1,684	494	303	313	303	182	447
1954	0	32	581	877	1,022	273	396	210	174	168	174	436
1955	71	143	0	0	349	454	357	225	232	225	102	1,917
1956	2,700	1,298	1,184	1,279	2,716	2,867	497	279	288	279	202	507
1957	0	40	495	396	1,067	1,732	411	319	330	319	84	169
1958	41	1,085	1,298	2,210	2,859	3,176	551	281	288	279	203	501
1959	0	252	291	39	261	270	261	261	270	261	0	0
1960	0	0	0	0	438	452	438	438	452	438	0	0
1961	0	0	0	0	386	398	386	386	398	386	0	0
1962	0	0	152	521	464	760	464	464	480	464	0	0
1963	34	509	461	1,424	3,083	1,907	466	413	427	413	72	125
1964	199	356	0	0	250	379	338	250	258	250	65	2,459
1965	2,282	1,126	970	1,436	1,783	2,278	735	346	254	459	603	859
1966	404	351	216	0	171	176	440	228	176	171	212	564
1967	430	782	1,089	1,607	2,228	3,773	1,638	274	284	274	248	643
1968	70	149	389	267	212	219	339	212	219	212	96	209
1969	1,959	1,611	1,239	2,218	4,177	3,263	711	363	374	382	339	922
1970	1,922	1,096	1,288	967	1,274	1,579	489	295	305	295	187	676
1971	735	826	794	920	635	1,679	581	371	261	334	258	692
1972	365	362	128	31	224	760	428	223	177	171	206	525
1973	547	1,147	982	963	1,796	1,279	500	252	234	226	246	872
1974	1,162	845	1,495	1,603	1,860	1,926	560	467	312	218	198	490
1975	22	0	828	970	1,253	2,551	666	438	452	368	300	677
1976	0	0	0	0	182	189	182	182	189	182	0	0
1977	0	0	0	0	37	38	37	37	38	37	0	0
1978	0	0	2	177	250	314	288	253	187	104	156	146
1979	82	15	101	174	537	555	537	537	555	537	0	0
1980	0	1,324	1,527	1,125	1,753	2,429	828	330	341	330	107	229
1981	0	164	311	352	233	241	331	233	241	233	74	453
1982	1,494	2,646	2,324	3,840	4,256	2,617	829	448	448	434	894	1,663
1983	1,699	2,385	3,799	2,063	3,016	5,817	2,943	689	535	531	1,644	2,644
1984	1,468	1,208	1,237	995	1,944	1,404	581	285	281	272	299	776
1985	305	185	0	537	241	162	354	194	162	157	145	344
1986	247	4,377	2,885	1,760	2,740	1,796	434	301	311	301	124	276
1987	0	0	0	0	236	244	236	236	244	236	0	0
1988	0	0	0	0	313	323	313	313	323	313	0	0
1989	0	0	0	0	494	511	494	494	511	494	0	0
1990	0	0	0	0	407	421	407	407	421	407	0	0
Minimum	0	0	0	0	37	38	37	37	38	37	0	0
Maximum	2,700	4,377	3,799	3,840	4,749	5,817	2,943	689	578	559	2,093	4,072
Average	377	557	647	729	1,342	1,409	493	316	311	302	175	442

## Camanche Reservoir Storage in Acre-Feet

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1921	331,995	349,367	371,898	416,481	397,010	430,879	395,297	356,449	326,444	309,247	295,441	301,173
1922	309,004	336,687	387,440	395,271	334,188	430,879	397,961	356,032	320,994	299,965	295,339	320,552
1923	317,882	323,581	330,872	346,543	385,632	394,045	365,423	335,278	316,497	308,553	292,447	288,209
1924	275,800	264,661	252,184	234,142	209,991	202,130	194,723	189,634	189,773	193,082	177,311	165,496
1925	155,478	149,288	139,145	134,654	248,561	323,707	320,782	321,068	330,068	343,741	327,578	313,899
1926	302,402	293,724	280,730	263,981	240,129	230,746	222,716	213,091	211,971	215,562	206,279	198,084
1927	197,955	241,073	268,049	310,206	360,765	430,879	391,343	352,883	325,765	320,002	300,051	292,067
1928	288,806	284,488	273,355	316,871	415,819	375,584	357,182	345,285	343,552	343,823	323,118	305,292
1929	294,698	284,367	272,608	254,975	229,783	221,615	210,791	203,373	201,927	203,455	186,942	173,609
1930	163,328	133,226	142,550	132,932	120,920	139,389	138,405	140,606	151,007	165,334	149,640	135,372
1931	123,847	113,021	100,677	83,366	88,660	90,341	92,419	96,652	105,720	120,048	110,646	105,583
1932	106,981	121,298	134,503	126,529	115,400	136,981	136,557	139,269	150,172	164,859	148,727	135,208
1933	124,615	117,105	104,874	87,464	79,811	86,583	90,118	96,699	111,292	130,000	113,806	103,741
1934	100,464	93,057	80,495	63,094	55,686	64,500	71,684	81,946	97,684	116,042	100,979	87,597
1935	76,881	65,763	54,358	40,169	59,196	133,160	139,936	149,764	167,743	189,927	173,949	160,427
1936	152,712	231,590	279,077	323,529	408,948	430,879	392,754	354,014	326,457	316,900	300,135	296,919
1937	290,824	301,269	327,194	372,824	413,993	423,081	392,930	356,505	330,406	320,285	310,190	263,759
1938	265,051	258,403	284,328	231,453	335,152	430,879	394,567	357,389	332,201	325,984	304,020	285,764
1939	274,628	265,498	253,970	235,866	213,134	205,867	196,787	191,105	191,969	193,171	178,838	164,899
1940	157,833	201,594	283,259	334,400	430,893	420,266	393,741	364,402	345,871	337,811	323,321	327,875
1941	316,249	301,269	327,194	374,040	399,000	430,879	392,557	347,208	311,895	298,742	289,124	295,652
1942	257,378	254,364	302,391	343,968	349,140	430,879	394,768	347,725	312,106	297,048	280,373	297,642
1943	255,389	233,096	273,355	315,129	413,952	418,255	384,632	347,577	321,746	311,321	296,809	298,388
1944	286,728	279,961	275,672	267,042	258,023	284,631	276,103	265,748	264,130	267,241	257,599	251,042
1945	255,957	290,297	322,597	362,340	381,050	421,718	394,212	357,005	328,818	318,038	302,808	281,665
1946	287,335	320,636	367,266	411,044	430,893	416,393	390,255	359,129	335,933	322,219	312,262	321,485
1947	325,966	325,886	314,212	317,369	290,552	276,580	260,361	245,963	240,176	239,907	224,030	210,131
1948	197,581	186,841	175,728	171,997	193,560	303,573	297,704	295,064	301,044	311,572	295,284	282,435
1949	275,022	264,710	260,523	280,190	300,130	331,632	322,734	310,987	307,884	309,004	297,277	290,960
1950	279,981	301,269	327,194	374,040	394,940	430,660	390,050	347,317	316,517	305,992	231,453	231,453
1951	231,453	231,453	273,355	351,129	423,616	388,847	375,345	352,815	340,173	333,049	326,640	328,570
1952	301,269	301,269	319,236	240,437	306,213	422,935	401,041	349,726	311,630	303,511	285,680	283,005
1953	294,247	258,849	268,088	308,640	307,052	341,122	326,315	306,298	296,696	293,856	282,868	291,714
1954	279,860	270,883	295,771	330,533	352,627	342,290	335,850	321,746	314,098	310,256	304,982	320,651
1955	319,139	316,670	303,511	286,935	268,754	270,499	263,462	251,562	248,208	249,141	239,335	244,416
1956	231,453	247,430	300,244	352,094	378,019	430,879	389,620	341,790	305,862	289,362	277,338	288,461
1957	277,097	269,013	290,515	296,727	318,094	361,123	347,895	335,499	333,393	332,679	315,262	307,828
1958	299,007	301,269	327,194	354,084	363,067	430,879	387,262	333,936	292,536	275,547	263,684	273,719
1959	263,054	270,186	275,206	259,782	236,188	227,237	214,756	205,557	205,784	209,072	192,535	178,478
1960	166,982	157,603	146,900	129,789	117,905	120,753	120,265	122,909	135,728	148,328	133,243	119,261
1961	107,237	96,329	84,256	67,233	74,830	78,739	80,878	86,216	97,041	113,390	103,711	94,642
1962	87,507	87,961	90,163	110,236	100,154	121,410	122,571	126,803	139,170	156,930	140,911	127,754
1963	117,689	138,907	156,534	227,516	355,827	393,409	367,161	344,242	332,281	333,970	300,178	288,561
1964	291,035	299,155	286,530	268,501	244,772	242,620	234,678	224,564	223,098	226,817	214,976	240,437
1965	244,958	257,559	304,109	363,248	385,615	422,069	388,352	338,070	292,990	291,985	293,130	328,390
1966	334,808	344,769	344,883	326,759	297,366	282,511	280,582	268,822	262,165	259,669	257,748	281,970
1967	301,088	314,196	326,109	354,867	288,669	405,088	416,678	351,166	298,098	278,167	270,550	290,248
1968	285,187	284,233	298,416	296,129	269,496	257,359	249,382	237,074	233,171	233,912	225,102	226,280
1969	294,035	301,088	326,109	314,413	352,094	430,879	391,826	338,437	297,388	283,604	279,724	316,256
1970	231,212	231,212	280,107	319,794	346,310	374,436	359,898	339,961	330,550	328,126	303,850	301,088
1971	302,628	311,984	327,514	364,203	344,623	371,785	355,846	333,568	314,825	312,483	306,394	328,390
1972	337,408	347,290	341,791	326,120	299,936	319,740	316,722	304,374	298,250	295,839	293,838	312,979
1973	301,088	301,088	326,109	365,326	414,071	414,643	390,955	358,609	335,616	325,948	261,176	263,467
1974	252,977	284,571	319,296	371,387	399,904	423,117	387,248	351,268	316,592	300,710	290,527	302,095
1975	290,949	283,830	326,109	366,759	359,886	414,616	378,814	336,344	304,670	298,074	293,646	315,959
1976	302,836	291,759	279,016	261,310	234,848	224,597	214,707	207,621	205,467	205,638	189,568	175,229
1977	162,808	151,583	139,053	121,292	107,199	89,392	72,351	57,843	48,400	44,115	34,572	25,440
1978	18,218	12,174	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000
1979	4,000	4,000	4,000	4,000	19,572	30,094	37,443	47,728	65,625	89,693	80,562	72,603
1980	71,359	145,716	232,825	288,685	324,387	382,961	369,171	330,672	303,414	297,953	281,744	277,219
1981	268,461	266,543	277,076	280,373	255,070	244,278	235,883	224,774	222,261	224,777	215,700	231,152
1982	245,863	231,152	270,642	292,045	374,401	418,592	377,692	320,483	277,133	261,539	236,759	243,150
1983	270,401	281,072	317,487	331,475	247,310	369,638	428,984	356,739	288,314	267,025	231,152	231,152
1984	231,152	240,075	290,357	331,693	387,751	393,970	373,319	341,066	318,894	311,257	297,350	327,362
1985	333,512	332,900	323,218	336,765	311,424	295,714	288,283	274,321	267,081	264,246	259,869	268,862
1986	271,643	236,156	272,873	351,129	407,259	426,201	385,657	343,807	315,537	302,591	285,366	280,926
1987	268,947	259,360	249,454	231,181	208,107	201,272	192,649	187,401	188,059	192,058	176,213	163,667
1988	152,957	141,509	128,721	111,917	114,542	113,520	112,889	114,457	120,960	132,621	123,438	116,152
1989	108,997	103,063	98,217	88,081	80,054	86,792	90,282	96,841	112,069	131,049	115,982	101,818
1990												

92 229 10-9983-WSIP

Composite Program V - GFS Eqn for Maint. of Camanche Hypoli

Fish Releases per Production Goal Faxed 1-2-92 w/Ramping

FLOPLD RINC TNF PRECP EVAP FOR 185 TAF Runoff USED FOR 1978

## Camanche Reservoir Elevation in Feet

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1921	222	224	227	234	231	235	231	225	221	218	216	217
1922	218	222	230	231	222	235	231	225	220	217	216	220
1923	220	220	222	224	229	231	227	222	219	218	216	215
1924	213	211	209	206	201	200	198	197	197	198	195	192
1925	190	188	186	185	208	220	220	220	221	223	221	219
1926	217	216	214	211	207	205	204	202	202	202	201	199
1927	199	207	212	218	226	235	230	225	221	220	217	215
1928	215	214	212	219	233	228	225	224	223	223	220	218
1929	216	214	212	209	205	203	201	200	200	200	197	194
1930	192	189	187	185	181	186	186	186	189	192	188	185
1931	182	179	176	170	172	172	173	175	177	181	179	177
1932	178	182	185	183	180	186	185	186	189	192	188	185
1933	182	180	177	172	169	171	172	175	179	184	180	177
1934	176	173	169	163	160	163	166	170	175	180	176	172
1935	168	164	159	151	161	185	186	189	192	197	194	191
1936	189	205	213	220	233	235	230	225	221	219	217	216
1937	215	217	221	228	233	234	230	225	221	220	218	211
1938	211	210	214	205	222	235	231	225	222	221	217	214
1939	213	211	209	206	202	200	199	197	198	198	195	192
1940	190	200	214	222	235	234	231	226	224	223	220	221
1941	219	217	221	228	231	235	230	224	219	217	215	216
1942	210	209	217	223	224	235	231	224	219	216	214	216
1943	209	209	212	225	233	234	229	224	220	219	216	217
1944	215	214	213	211	210	214	213	211	211	211	210	209
1945	209	215	220	226	229	234	231	225	221	220	217	214
1946	215	220	227	233	235	234	230	226	222	220	219	220
1947	221	221	219	219	215	213	210	208	207	207	204	201
1948	199	197	194	193	198	217	216	216	217	219	216	214
1949	213	211	210	214	217	222	220	218	218	218	216	215
1950	214	217	221	228	231	235	230	224	219	218	205	205
1951	205	205	212	225	235	230	228	225	223	222	221	221
1952	217	217	220	207	218	234	232	224	219	217	214	214
1953	216	210	212	218	218	223	221	218	216	216	214	215
1954	214	212	216	221	225	223	222	220	219	218	218	220
1955	220	219	217	215	212	212	211	209	208	208	207	207
1956	205	208	217	225	228	235	230	223	218	215	213	215
1957	213	212	215	216	220	226	224	222	222	222	219	218
1958	217	217	221	225	226	235	230	222	216	213	211	212
1959	211	212	213	210	206	204	202	200	200	201	198	195
1960	192	190	188	184	181	181	181	182	185	188	185	181
1961	178	174	170	164	167	169	169	171	175	179	177	174
1962	172	172	172	179	176	182	182	183	186	190	186	183
1963	181	186	190	204	225	230	227	224	222	222	217	215
1964	215	217	215	212	208	207	206	204	204	204	202	207
1965	208	210	217	226	229	234	230	223	216	215	216	221
1966	222	224	224	221	216	214	214	212	211	210	210	214
1967	217	219	221	225	215	232	234	225	216	213	212	215
1968	214	214	217	216	212	210	208	206	205	206	204	204
1969	216	217	221	219	225	235	230	223	216	214	213	219
1970	205	205	214	220	224	228	226	223	221	221	217	217
1971	217	219	221	226	224	227	225	222	219	219	218	221
1972	223	224	223	221	217	220	219	217	216	216	216	219
1973	217	217	221	227	233	233	230	226	222	221	210	211
1974	209	214	220	227	231	234	230	225	219	217	215	217
1975	215	214	221	227	226	233	228	222	218	216	216	219
1976	217	215	213	210	206	204	202	201	200	200	197	194
1977	191	189	186	182	178	172	166	160	155	153	147	141
1978	134	128	119	119	119	119	119	119	119	119	119	119
1979	119	119	119	119	136	144	149	155	164	172	169	166
1980	166	188	205	215	221	229	227	221	217	216	214	213
1981	212	211	213	214	209	207	206	204	203	204	202	205
1982	208	205	212	215	228	234	228	220	213	210	206	207
1983	212	214	219	222	208	227	235	225	215	211	205	205
1984	205	207	215	222	230	231	228	223	220	219	216	221
1985	222	222	220	222	219	216	215	213	211	211	210	212
1986	212	206	212	225	232	235	229	223	219	217	214	214
1987	212	210	208	205	201	200	198	197	197	198	194	192
1988	189	187	183	179	180	179	179	180	181	184	182	180
1989	178	176	175	172	169	171	172	175	179	184	180	176
1990	173	169	165	157	162	164	165	168	172	178	175	172

Minimum	119	119	119	119	119	119	119	119	119	119	119	119
Maximum	223	224	230	234	235	235	235	226	224	223	221	221
Average	203	203	205	207	209	213	211	208	206	206	204	203

## Total Camanche Releases in CFS

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1921	696	774	711	278	1,398	1,928	848	746	609	403	356	300
1922	201	305	200	278	2,869	2,549	960	858	721	497	356	396
1923	514	459	200	278	915	1,169	766	664	528	347	356	300
1924	201	200	199	280	572	312	281	247	182	150	256	220
1925	200	200	201	278	603	371	402	352	237	178	256	220
1926	200	200	200	278	603	371	402	352	237	178	256	220
1927	200	200	200	278	1,113	1,414	948	846	710	374	421	300
1928	201	200	1,110	278	658	912	509	408	271	247	356	300
1929	201	200	199	280	572	312	318	266	190	150	256	220
1930	200	200	201	278	603	371	402	352	237	178	256	220
1931	200	200	199	280	246	309	281	247	182	100	156	145
1932	116	108	135	173	603	371	402	352	237	178	256	220
1933	200	200	200	278	603	371	402	352	237	178	256	220
1934	200	200	199	280	572	312	318	266	190	150	256	220
1935	200	200	201	278	603	371	402	352	237	178	256	220
1936	200	200	200	278	1,255	1,532	935	833	696	410	356	300
1937	201	201	809	278	990	1,243	841	739	602	348	356	1,249
1938	243	1,291	1,791	2,447	3,019	2,287	1,095	989	845	543	392	343
1939	201	200	199	280	572	312	318	266	190	150	256	220
1940	200	200	201	278	1,517	1,169	766	664	528	369	356	300
1941	569	917	683	289	1,340	1,675	995	893	756	395	356	477
1942	1,405	1,073	216	296	2,332	2,072	1,067	964	824	483	576	464
1943	1,566	1,046	1,889	773	1,738	1,294	891	788	649	403	369	314
1944	201	200	200	278	603	371	402	352	237	178	256	220
1945	200	294	200	278	1,039	1,293	891	789	652	389	533	1,115
1946	641	225	200	278	906	1,143	740	639	502	356	356	300
1947	201	200	200	278	603	371	402	352	237	178	256	220
1948	200	200	200	278	603	371	402	352	237	178	256	220
1949	200	200	200	278	603	371	402	352	237	178	256	220
1950	237	349	340	385	1,130	1,386	984	879	736	425	3,399	4,173
1951	1,348	1,132	442	351	794	1,047	645	543	406	336	356	684
1952	1,438	1,323	1,149	3,117	3,213	1,952	1,334	1,227	1,080	567	405	358
1953	204	1,169	200	278	806	1,060	657	555	418	322	356	300
1954	201	200	200	278	616	389	422	365	245	192	256	220
1955	200	200	200	278	603	371	402	352	237	178	256	2,007
1956	3,085	1,028	310	394	2,266	1,913	1,081	977	836	522	378	326
1957	201	200	200	278	695	949	546	444	307	301	356	300
1958	228	1,175	1,048	1,943	2,673	1,971	1,174	1,070	928	519	380	328
1959	201	200	200	278	603	371	402	352	237	178	256	220
1960	200	200	200	278	603	371	402	352	237	178	256	220
1961	200	200	199	280	246	309	318	266	190	100	156	145
1962	116	108	135	173	603	371	402	352	237	178	256	220
1963	200	200	200	278	958	1,212	809	708	571	368	662	300
1964	201	200	200	278	603	371	402	352	237	178	256	2,272
1965	2,310	900	213	441	1,366	1,599	1,197	1,094	955	442	597	318
1966	327	200	200	278	603	371	402	352	237	178	256	220
1967	284	558	944	1,237	3,261	1,766	1,364	1,260	1,118	570	378	325
1968	201	200	200	278	603	371	402	352	237	178	256	220
1969	1,039	1,687	858	2,421	3,514	1,875	1,259	1,153	1,008	585	399	350
1970	3,437	1,110	550	284	793	1,048	645	543	405	304	642	808
1971	722	654	570	278	909	1,162	760	658	521	336	356	394
1972	216	200	200	278	603	371	402	352	237	178	256	220
1973	881	1,301	651	278	949	1,203	800	698	561	379	1,357	915
1974	1,398	285	961	737	1,343	1,477	1,074	972	836	453	356	300
1975	201	200	211	278	1,314	1,568	1,165	1,063	926	462	356	300
1976	201	200	199	280	572	312	281	247	182	150	256	220
1977	200	200	200	280	246	309	281	247	182	100	156	145
1978	116	108	134	175	246	309	281	247	182	100	156	145
1979	116	108	135	173	278	368	402	352	237	138	156	145
1980	116	108	135	173	1,129	1,383	980	879	742	382	356	300
1981	201	200	200	278	603	371	402	352	237	178	256	231
1982	1,384	3,005	1,823	3,589	2,871	1,811	1,410	1,301	1,150	687	1,386	1,693
1983	1,464	2,324	3,475	1,844	4,347	3,705	1,893	1,784	1,634	850	2,338	2,783
1984	1,494	1,084	424	278	982	1,236	833	732	595	378	587	300
1985	201	200	200	278	603	371	402	352	237	178	256	220
1986	242	5,210	2,415	464	1,778	1,410	1,008	903	759	475	392	342
1987	201	200	199	280	572	312	318	266	190	150	256	220
1988	200	200	200	280	246	309	281	247	182	100	156	145
1989	116	108	135	173	603	371	402	352	237	178	256	220
1990	200	200	199	280	246	309	318	266	190	100	156	145

Minimum	116	108	134	173	246	309	281	247	182	100	156	145
Maximum	3,437	5,210	3,475	3,589	4,347	3,705	1,893	1,784	1,634	850	3,399	4,173
Average	510	556	463	502	1,095	953	668	592	473	297	422	477

## Flow at Victor (Bruella Rd) CFS

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1921	675	756	683	231	1,273	1,762	675	625	533	360	337	274
1922	180	287	172	231	2,744	2,384	787	737	645	454	337	371
1923	493	440	172	231	790	1,003	593	543	451	304	337	274
1924	180	181	171	233	502	224	221	196	147	126	237	195
1925	178	181	173	231	533	283	317	286	195	154	237	195
1926	178	181	172	231	533	283	317	286	195	154	237	195
1927	178	181	172	231	988	1,249	775	725	633	331	402	274
1928	180	181	1,082	231	533	747	337	286	195	204	337	274
1929	180	181	171	233	502	224	233	200	147	126	237	195
1930	178	181	173	231	533	283	317	286	195	154	237	195
1931	178	181	171	233	177	220	221	196	147	77	137	120
1932	95	89	107	126	533	283	317	286	195	154	237	195
1933	178	181	172	231	533	283	317	286	195	154	237	195
1934	178	181	171	233	502	224	233	200	147	126	237	195
1935	178	181	173	231	533	283	317	286	195	154	237	195
1936	178	181	172	231	1,129	1,367	762	711	620	367	337	274
1937	180	182	781	231	864	1,078	668	618	526	305	337	1,224
1938	209	1,260	1,748	2,385	2,878	2,104	905	852	755	490	362	305
1939	180	181	171	233	502	224	233	200	147	126	237	195
1940	178	181	173	231	1,392	1,003	594	543	451	326	337	274
1941	548	898	655	242	1,215	1,509	822	772	680	352	337	452
1942	1,379	1,050	183	244	2,201	1,901	888	837	743	437	553	435
1943	1,541	1,024	1,856	722	1,607	1,122	713	661	568	357	346	285
1944	180	181	172	231	533	283	317	286	195	154	237	195
1945	178	276	172	231	914	1,128	718	667	576	346	514	1,090
1946	620	206	172	231	780	978	568	517	425	314	337	274
1947	180	181	172	231	533	283	317	286	195	154	237	195
1948	178	181	172	231	533	283	317	286	195	154	237	195
1949	178	181	172	231	533	283	317	286	195	154	237	195
1950	205	321	300	325	991	1,206	797	744	648	374	3,371	4,136
1951	1,326	1,113	414	304	668	882	472	422	330	293	337	659
1952	1,399	1,289	1,101	3,050	3,066	1,764	1,138	1,084	986	511	371	315
1953	183	1,151	172	231	681	894	484	434	342	279	337	274
1954	180	181	172	231	533	283	317	286	195	165	237	195
1955	178	181	172	231	533	283	317	286	195	154	237	1,982
1956	3,056	1,003	273	339	2,131	1,737	898	846	752	473	352	293
1957	180	181	172	231	570	783	373	323	231	258	337	274
1958	198	1,148	1,011	1,886	2,537	1,795	990	938	843	469	354	294
1959	180	181	172	231	533	283	317	286	195	154	237	195
1960	178	181	172	231	533	283	317	286	195	154	237	195
1961	178	181	171	233	177	220	233	200	147	77	137	120
1962	95	89	107	126	533	283	317	286	195	154	237	195
1963	178	181	172	231	833	1,047	637	586	495	325	643	274
1964	180	181	172	231	533	283	317	286	195	154	237	2,247
1965	2,285	878	181	391	1,236	1,429	1,019	968	875	397	574	289
1966	306	181	172	231	533	283	317	286	195	154	237	195
1967	255	533	908	1,182	3,126	1,590	1,181	1,129	1,034	521	352	292
1968	180	181	172	231	533	283	317	286	195	154	237	195
1969	1,003	1,654	813	2,357	3,370	1,690	1,067	1,013	915	530	367	310
1970	3,414	1,090	520	236	666	880	470	419	327	260	621	781
1971	701	636	542	231	783	997	587	537	445	293	337	369
1972	195	181	172	231	533	283	317	286	195	154	237	195
1973	860	1,282	623	231	824	1,037	627	577	485	336	1,338	890
1974	1,377	267	933	690	1,218	1,311	902	851	759	410	337	274
1975	180	181	183	231	1,189	1,402	992	942	850	419	337	274
1976	180	181	171	233	502	224	221	196	147	126	237	195
1977	178	181	172	233	177	220	221	196	147	77	137	120
1978	95	89	106	128	177	220	221	196	147	77	137	120
1979	95	89	107	126	208	280	317	286	195	114	137	120
1980	95	89	107	126	1,004	1,218	808	757	666	340	337	274
1981	180	181	172	231	533	283	317	286	195	154	237	206
1982	1,339	2,964	1,768	3,514	2,716	1,613	1,205	1,149	1,048	625	1,346	1,643
1983	1,418	2,283	3,420	1,769	4,191	3,508	1,688	1,633	1,531	788	2,298	2,733
1984	1,473	1,066	396	231	857	1,071	661	610	518	336	568	274
1985	180	181	172	231	533	283	317	286	195	154	237	195
1986	208	5,181	2,373	403	1,637	1,228	819	766	669	422	362	304
1987	180	181	171	233	502	224	233	200	147	126	237	195
1988	178	181	172	233	177	220	221	196	147	77	137	120
1989	95	89	107	126	533	283	317	286	195	154	237	195
1990	178	181	171	233	177	220	233	200	147	77	137	120
Minimum	95	89	106	126	177	220	221	196	147	77	137	120
Maximum	3,414	5,181	3,420	3,514	4,191	3,508	1,688	1,633	1,531	788	3,371	4,136
Average	486	535	432	453	994	823	538	497	411	262	401	449

## Flow Below Lodi Lake in CFS

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1921	629	715	625	124	1,087	1,512	386	359	357	265	299	228
1922	134	247	114	124	2,559	2,134	499	472	469	359	299	325
1923	447	400	114	124	604	754	305	278	275	209	299	228
1924	134	141	114	124	348	33	18	19	19	68	199	149
1925	133	141	115	124	348	33	29	21	19	59	199	149
1926	133	141	114	124	348	33	29	21	19	59	199	149
1927	133	141	114	124	802	999	487	460	457	236	364	228
1928	134	141	1,024	124	348	497	48	21	19	109	299	228
1929	134	141	114	124	348	33	29	21	19	68	199	149
1930	133	141	115	124	348	33	29	21	19	59	199	149
1931	133	141	114	124	23	30	18	19	19	19	99	74
1932	49	49	49	19	348	33	29	21	19	59	199	149
1933	133	141	114	124	348	33	29	21	19	59	199	149
1934	133	141	114	124	348	33	29	21	19	68	199	149
1935	133	141	115	124	348	33	29	21	19	59	199	149
1936	133	141	114	124	944	1,117	473	446	444	272	299	228
1937	134	142	723	124	679	828	379	352	350	210	299	1,178
1938	133	1,193	1,658	2,242	2,655	1,815	576	549	547	371	299	228
1939	134	141	114	124	348	33	29	21	19	68	199	149
1940	133	141	115	124	1,207	754	305	278	275	231	299	228
1941	502	858	598	135	1,030	1,259	534	507	504	257	299	406
1942	1,323	1,001	114	124	2,003	1,637	586	559	556	334	507	378
1943	1,485	974	1,787	602	1,409	859	411	383	381	254	299	228
1944	134	141	114	124	348	33	29	21	19	59	199	149
1945	133	236	114	124	729	878	429	402	400	251	476	1,044
1946	575	166	114	124	595	728	279	252	249	218	299	228
1947	134	141	114	124	348	33	29	21	19	59	199	149
1948	133	141	114	124	348	33	29	21	19	59	199	149
1949	133	141	114	124	348	33	29	21	19	59	199	149
1950	133	257	214	187	773	922	474	447	444	258	3,311	4,064
1951	1,281	1,073	356	197	483	632	183	156	154	198	299	613
1952	1,312	1,212	999	2,895	2,830	1,461	796	768	766	384	299	228
1953	138	1,111	114	124	495	644	196	168	166	184	299	228
1954	134	141	114	124	348	33	29	21	19	69	199	149
1955	133	141	114	124	348	33	29	21	19	59	199	1,936
1956	2,992	946	195	210	1,923	1,463	586	558	556	364	299	228
1957	134	141	114	124	384	533	85	58	55	163	299	228
1958	133	1,091	932	1,756	2,327	1,519	675	648	646	359	299	228
1959	134	141	114	124	348	33	29	21	19	59	199	149
1960	133	141	114	124	348	33	29	21	19	59	199	149
1961	133	141	114	124	23	30	29	21	19	19	99	74
1962	49	49	49	19	348	33	29	21	19	59	199	149
1963	133	141	114	124	648	797	348	321	319	230	605	228
1964	134	141	114	124	348	33	29	21	19	59	199	2,201
1965	2,231	830	114	273	1,040	1,168	719	692	690	295	530	234
1966	260	141	114	124	348	33	29	21	19	59	199	149
1967	192	477	830	1,053	2,918	1,317	868	841	839	412	299	228
1968	134	141	114	124	348	33	29	21	19	59	199	149
1969	922	1,583	717	2,208	3,141	1,394	731	704	702	408	299	228
1970	3,365	1,046	458	124	476	625	177	149	147	161	581	731
1971	655	595	484	124	598	747	298	271	269	198	299	323
1972	149	141	114	124	348	33	29	21	19	59	199	149
1973	814	1,242	565	124	638	787	339	311	309	241	1,300	844
1974	1,331	226	876	583	1,033	1,062	613	586	583	315	299	228
1975	134	141	126	124	1,003	1,152	704	677	674	324	299	228
1976	134	141	114	124	348	33	18	19	19	68	199	149
1977	133	141	115	124	23	30	18	19	19	19	99	74
1978	49	49	49	19	23	30	18	19	19	19	99	74
1979	49	49	49	19	23	30	29	21	19	19	99	74
1980	49	49	49	19	819	968	519	492	490	244	299	228
1981	134	141	114	124	348	33	29	21	19	59	199	160
1982	1,235	2,873	1,648	3,339	2,460	1,289	840	813	811	486	1,261	1,540
1983	1,315	2,192	3,299	1,594	3,935	3,183	1,324	1,297	1,294	649	2,212	2,629
1984	1,427	1,026	338	124	672	821	372	345	343	240	530	228
1985	134	141	114	124	348	33	29	21	19	59	199	149
1986	133	5,114	2,284	261	1,415	940	491	464	462	304	299	228
1987	134	141	114	124	348	33	29	21	19	68	199	149
1988	133	141	115	124	23	30	18	19	19	19	99	74
1989	49	49	49	19	348	33	29	21	19	59	199	149
1990	133	141	114	124	23	30	29	21	19	19	99	74
Minimum	49	49	49	19	23	30	18	19	19	19	99	74
Maximum	3,365	5,114	3,299	3,339	3,935	3,183	1,324	1,297	1,294	649	3,311	4,064
Average	435	491	369	339	808	576	257	240	238	169	359	398

## Flow into the Delta in CFS

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1921	622	708	616	110	1,064	1,482	357	338	342	255	291	219
1922	127	239	105	110	2,536	2,103	469	450	455	348	291	315
1923	440	392	105	110	581	723	276	256	261	198	291	219
1924	127	133	105	110	325	3	0	4	8	58	191	140
1925	125	133	106	110	325	3	0	0	4	49	191	140
1926	125	133	105	110	325	3	0	0	4	49	191	140
1927	125	133	105	110	779	968	458	438	443	225	356	219
1928	127	133	1,015	110	325	466	19	0	4	99	291	219
1929	127	133	105	110	325	3	0	0	4	58	191	140
1930	125	133	106	110	325	3	0	0	4	49	191	140
1931	125	133	105	110	0	0	0	4	8	9	91	65
1932	42	42	40	5	325	3	0	0	4	49	191	140
1933	125	133	105	110	325	3	0	0	4	49	191	140
1934	125	133	105	110	325	3	0	0	4	58	191	140
1935	125	133	106	110	325	3	0	0	4	49	191	140
1936	125	133	105	110	921	1,086	444	425	429	262	291	219
1937	127	135	714	110	656	798	350	331	335	200	291	1,168
1938	125	1,186	1,649	2,229	2,632	1,784	547	528	532	361	291	219
1939	127	133	105	110	325	3	0	0	4	58	191	140
1940	125	133	106	110	1,184	723	276	256	261	221	291	219
1941	495	850	589	121	1,007	1,229	505	485	490	246	291	397
1942	1,315	993	105	110	1,980	1,606	556	537	542	323	498	369
1943	1,477	967	1,778	588	1,386	829	381	362	367	244	291	219
1944	127	133	105	110	325	3	0	0	4	49	191	140
1945	125	228	105	110	706	847	400	381	385	241	468	1,034
1946	567	159	105	110	572	697	250	230	235	208	291	219
1947	127	133	105	110	325	3	0	0	4	49	191	140
1948	125	133	105	110	325	3	0	0	4	49	191	140
1949	125	133	105	110	325	3	0	0	4	49	191	140
1950	125	250	205	174	750	892	444	425	430	248	3,303	4,054
1951	1,273	1,065	347	183	460	601	154	135	139	187	291	603
1952	1,305	1,205	990	2,881	2,807	1,430	766	747	752	373	291	219
1953	130	1,103	105	110	472	614	166	147	152	174	291	219
1954	127	133	105	110	325	3	0	0	4	59	191	140
1955	125	133	105	110	325	3	0	0	4	49	191	1,926
1956	2,984	939	187	196	1,900	1,433	556	537	542	353	291	219
1957	127	133	105	110	361	503	55	36	41	153	291	219
1958	125	1,083	923	1,742	2,304	1,489	646	627	631	348	291	219
1959	127	133	105	110	325	3	0	0	4	49	191	140
1960	125	133	105	110	325	3	0	0	4	49	191	140
1961	125	133	105	110	0	0	0	0	4	9	91	65
1962	42	42	40	5	325	3	0	0	4	49	191	140
1963	125	133	105	110	625	766	319	299	304	219	597	219
1964	127	133	105	110	325	3	0	0	4	49	191	2,191
1965	2,223	822	105	259	1,017	1,137	690	671	675	284	521	225
1966	253	133	105	110	325	3	0	0	4	49	191	140
1967	184	469	822	1,039	2,895	1,287	839	820	824	402	291	219
1968	127	133	105	110	325	3	0	0	4	49	191	140
1969	914	1,575	708	2,194	3,118	1,364	702	683	687	398	291	219
1970	3,357	1,039	450	110	453	595	147	128	133	151	572	721
1971	648	588	475	110	575	716	269	250	254	188	291	313
1972	142	133	105	110	325	3	0	0	4	49	191	140
1973	806	1,234	556	110	615	757	309	290	295	230	1,292	834
1974	1,323	219	867	569	1,010	1,031	584	564	569	305	291	219
1975	127	133	117	110	980	1,122	674	655	660	313	291	219
1976	127	133	105	110	325	3	0	4	8	58	191	140
1977	125	133	106	110	0	0	0	4	8	9	91	65
1978	42	42	40	5	0	0	0	4	8	9	91	65
1979	42	42	40	5	0	0	0	0	4	9	91	65
1980	42	42	40	5	796	937	490	471	475	234	291	219
1981	127	133	105	110	325	3	0	0	4	49	191	150
1982	1,228	2,866	1,639	3,326	2,437	1,258	811	792	796	475	1,252	1,530
1983	1,307	2,185	3,290	1,581	3,912	3,153	1,295	1,275	1,280	638	2,204	2,620
1984	1,420	1,018	330	110	649	790	343	323	328	230	522	219
1985	127	133	105	110	325	3	0	0	4	49	191	140
1986	125	5,107	2,275	248	1,392	909	462	443	447	294	291	219
1987	127	133	105	110	325	3	0	0	4	58	191	140
1988	125	133	106	110	0	0	0	4	8	9	91	65
1989	42	42	40	5	325	3	0	0	4	49	191	140
1990	125	133	105	110	0	0	0	0	4	9	91	65
Minimum	42	42	40	5	0	0	0	0	4	9	91	65
Maximum	3,357	5,107	3,290	3,326	3,912	3,153	1,295	1,275	1,280	638	3,303	4,054
Average	428	483	360	325	785	546	229	219	224	159	351	389

## Pardee Reservoir Storage In Acre-Feet

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1921	169,347	138,827	125,730	103,075	190,189	209,995	196,248	183,680	172,023	164,699	171,814	182,684
1922	182,267	174,040	148,226	165,282	209,985	209,995	199,942	185,235	169,774	160,862	166,201	182,684
1923	192,256	187,498	188,716	209,995	209,985	209,995	199,842	180,216	161,955	149,245	157,796	168,124
1924	178,471	169,822	160,913	161,411	157,371	147,980	138,656	129,210	120,946	119,430	114,864	112,798
1925	118,110	177,853	209,985	209,995	209,985	209,995	186,998	161,340	141,923	126,179	137,767	147,832
1926	159,227	167,077	165,606	177,684	190,997	186,521	172,970	166,339	160,679	160,584	175,819	182,684
1927	196,182	209,960	209,985	209,995	209,985	209,995	196,100	174,651	153,586	137,005	148,205	161,956
1928	169,352	172,493	209,985	209,995	209,985	205,867	192,917	178,419	165,462	156,294	165,632	160,777
1929	154,259	148,923	149,364	158,734	162,098	159,396	157,696	156,127	154,766	157,221	164,286	169,049
1930	175,793	174,172	192,384	199,521	198,804	198,724	187,471	178,267	169,906	164,600	174,734	177,613
1931	170,047	162,590	161,995	159,423	158,340	150,739	147,809	137,098	125,922	117,314	113,569	118,069
1932	106,023	107,298	93,495	111,778	158,128	209,995	206,655	197,251	187,887	180,884	184,831	182,684
1933	182,089	165,128	167,487	193,004	209,985	209,995	196,359	190,873	188,713	191,223	191,337	182,684
1934	192,526	192,389	209,985	203,256	190,539	190,990	185,338	168,690	153,754	141,331	139,883	137,825
1935	141,637	153,379	171,746	209,995	209,985	209,995	194,146	175,293	157,814	145,825	155,458	166,168
1936	195,921	209,960	199,168	194,975	209,985	209,995	199,660	184,331	169,149	157,766	167,556	180,756
1937	180,605	208,906	209,985	205,824	209,985	209,995	194,788	180,124	164,890	154,083	161,984	182,684
1938	190,121	209,960	209,985	209,995	209,985	209,995	207,858	180,814	152,172	127,125	140,381	154,320
1939	168,710	161,671	165,883	172,240	169,033	174,793	172,260	170,199	171,524	179,655	180,014	173,271
1940	204,535	209,960	209,985	209,995	209,985	205,685	189,105	171,853	154,278	141,969	153,516	176,831
1941	188,664	205,495	200,510	194,191	209,985	209,995	200,617	187,705	174,441	165,298	172,245	182,684
1942	209,985	209,960	178,322	186,227	209,985	209,995	209,698	194,097	177,820	163,998	180,457	182,684
1943	209,985	207,273	209,985	209,995	209,985	209,995	199,145	183,976	167,272	156,241	166,919	180,545
1944	189,179	166,451	202,982	209,995	209,985	182,968	171,528	161,080	149,257	142,320	163,243	182,684
1945	183,736	209,960	209,985	196,253	209,985	209,995	189,385	171,813	153,540	140,372	151,129	182,684
1946	180,142	159,580	143,737	126,741	209,985	197,846	185,041	171,714	159,202	152,373	167,926	182,684
1947	179,318	180,176	188,874	194,474	190,925	186,696	178,989	170,562	163,110	164,726	164,008	156,940
1948	169,777	159,599	161,549	198,009	180,739	209,995	192,399	174,751	156,636	140,880	150,592	162,978
1949	169,914	160,671	175,175	189,685	209,985	200,645	191,320	178,963	167,177	158,524	168,796	177,159
1950	197,423	209,960	209,985	209,995	209,985	209,995	191,864	170,618	150,327	135,577	209,995	209,985
1951	209,985	209,960	209,985	209,995	209,985	209,995	191,242	177,249	163,250	150,341	157,796	182,684
1952	209,985	209,960	209,985	209,995	209,985	209,995	209,985	187,997	162,123	138,805	153,374	174,600
1953	204,191	193,901	209,985	209,995	209,985	209,995	207,232	190,153	175,389	167,380	178,758	182,684
1954	195,871	208,627	209,985	209,995	209,985	209,995	190,493	183,816	181,962	183,830	192,759	182,684
1955	188,988	184,947	197,675	204,858	209,985	209,995	194,158	183,505	172,716	165,521	172,630	209,985
1956	209,985	209,960	209,985	209,995	209,985	209,995	203,292	185,715	167,359	157,286	172,049	182,684
1957	193,635	209,032	209,985	207,119	209,985	209,995	191,021	172,922	157,511	152,036	169,018	182,684
1958	205,757	209,960	209,985	209,995	209,985	209,995	209,985	200,365	183,498	173,176	183,220	182,684
1959	197,253	209,960	209,985	209,995	198,748	191,116	181,549	174,525	167,722	164,683	169,942	176,136
1960	172,147	180,578	188,883	197,715	209,985	209,995	196,187	183,802	171,924	162,285	168,354	174,935
1961	175,126	166,808	163,322	162,002	151,414	148,932	145,893	141,973	139,138	136,724	133,865	129,727
1962	124,817	158,992	154,207	170,535	169,767	209,995	196,045	189,752	181,991	183,774	189,762	182,684
1963	200,270	209,960	206,009	209,995	209,985	209,995	195,831	179,276	162,222	149,480	166,295	182,684
1964	194,739	186,859	196,532	205,114	196,625	185,336	173,605	165,888	159,301	157,509	173,719	209,985
1965	209,985	209,960	193,840	209,995	209,985	209,995	194,481	187,502	192,901	200,696	209,995	182,684
1966	175,428	156,781	162,101	190,502	198,693	187,188	167,259	158,649	156,630	154,107	161,246	182,684
1967	209,985	197,670	209,985	209,995	209,985	209,995	209,985	196,337	182,584	172,485	183,151	182,684
1968	195,563	209,450	209,985	209,995	198,629	194,652	178,327	166,862	157,908	151,783	166,241	182,684
1969	209,985	209,960	209,985	209,995	209,985	209,995	209,985	200,488	189,559	183,032	186,329	182,684
1970	209,985	209,960	209,985	196,618	209,985	209,995	197,876	180,398	163,451	151,416	179,449	209,985
1971	207,502	199,049	207,552	204,463	204,437	209,995	206,434	209,121	200,671	197,432	195,448	182,684
1972	172,747	157,857	183,457	209,321	209,985	209,995	194,334	186,109	181,754	183,140	189,220	182,684
1973	209,985	209,960	208,066	206,948	209,985	209,995	198,367	181,435	166,445	158,415	184,802	209,985
1974	209,985	203,184	209,985	209,995	209,985	209,995	209,985	205,236	194,273	193,724	182,684	
1975	184,493	199,770	209,985	194,731	208,186	209,995	208,980	209,985	209,995	209,136	209,995	182,684
1976	186,110	174,808	167,407	162,135	157,351	150,665	142,596	135,814	128,370	118,906	107,047	91,041
1977	80,088	63,175	50,204	45,039	47,556	48,137	48,493	48,689	50,513	45,769	37,695	23,363
1978	16,802	24,843	40,321	45,076	54,462	39,092	27,451	22,222	28,226	28,043	19,541	16,800
1979	26,208	42,238	97,487	149,076	200,372	209,995	202,372	181,435	158,636	138,525	145,672	161,612
1980	209,985	209,960	209,985	208,094	209,985	209,995	205,410	201,199	184,056	173,501	189,052	182,684
1981	205,799	209,544	209,985	209,995	202,293	194,245	180,624	167,734	158,115	156,212	176,666	209,985
1982	209,985	209,960	209,985	209,995	209,985	209,995	209,985	200,988	182,102	170,483	209,995	209,985
1983	209,985	209,960	209,985	209,995	209,985	209,995	209,985	208,461	207,892	209,995	209,995	
1984	209,985	209,960	209,985	208,094	209,985	209,995	205,410	201,199	184,056	173,501	189,052	182,684
1985	164,652	167,677	199,705	209,995	200,068	192,418	175,253	169,738	166,142	168,081	180,305	182,684
1986	198,934	209,960	209,985	209,995	209,985	209,995	199,533	182,475	166,331	152,751	165,538	174,028
1987	177,068	173,208	179,574	179,055	165,904	156,627	156,663	156,342	154,000	140,853	130,690	126,221
1988	129,360	121,279	118,216	120,610	121,535	126,259	131,102	129,868	125,752	116,533	109,512	103,054
1989	93,515	85,767	129,764	180,334	209,985	209,995	197,235	182,208	170,633	150,548	165,977	178,159
1990	191,085	18										

92 250 10-9993-WS1P  
 Composite Program VI - GFS Eqn for Maint. of Camanche Hypol  
 Fish Releases per Production Goal Faxed 1-2-92 w/Ramping  
 Drought Planning Sequence - 1976-1977-185 TAF

Pardee Reservoir Elevation In Feet

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1921	548.3	531.4	523.4	508.1	558.6	567.7	561.4	555.5	549.7	545.9	549.6	555.0
1922	554.8	550.7	536.9	546.2	567.7	567.7	563.1	556.2	548.5	543.8	546.6	555.0
1923	559.6	557.3	557.9	567.7	567.7	567.7	563.1	553.8	544.4	537.4	542.2	547.7
1924	552.9	548.5	543.8	544.1	541.9	536.7	531.3	525.6	520.3	519.3	516.3	514.9
1925	518.5	552.6	567.7	567.7	567.7	567.7	557.1	544.1	533.2	523.7	530.8	536.6
1926	542.9	547.1	546.3	552.5	559.0	556.8	550.1	546.7	543.7	543.7	551.6	555.0
1927	561.4	567.7	567.7	567.7	567.7	567.7	561.4	551.0	539.9	530.3	536.8	544.4
1928	548.3	549.9	567.7	567.7	567.7	565.8	559.9	552.9	546.3	541.3	546.3	543.8
1929	540.2	537.3	537.5	542.7	544.5	543.0	542.1	541.3	540.5	541.9	545.6	548.1
1930	551.6	550.8	559.6	563.0	562.6	562.6	557.3	552.8	548.6	545.8	551.0	552.5
1931	548.6	544.7	544.4	543.0	542.5	538.3	536.6	530.4	523.5	517.9	515.4	518.4
1932	510.2	511.1	501.0	514.2	542.3	567.7	566.2	561.9	557.5	554.1	556.0	555.0
1933	554.7	546.1	547.3	559.9	567.7	567.7	561.5	558.9	557.9	559.1	559.1	555.0
1934	559.7	559.6	567.7	564.7	558.8	559.0	556.3	547.9	540.0	532.9	532.0	530.8
1935	533.1	539.7	549.5	567.7	567.7	567.7	560.5	551.3	542.2	535.5	540.9	546.6
1936	561.3	567.7	562.8	560.9	567.7	567.7	563.0	555.8	548.2	542.2	547.4	554.0
1937	554.0	567.2	567.7	565.8	567.7	567.7	560.8	553.7	546.0	540.1	544.4	555.0
1938	558.6	567.7	567.7	567.7	567.7	567.7	566.7	554.1	539.1	524.3	532.3	540.3
1939	548.0	544.3	546.5	549.8	548.1	551.1	549.8	548.7	549.4	553.5	553.7	550.3
1940	565.2	567.7	567.7	567.7	567.7	565.8	558.1	549.6	540.2	533.3	539.8	552.1
1941	557.9	565.7	563.4	560.5	567.7	567.7	563.5	557.4	550.9	546.2	549.8	555.0
1942	567.7	567.7	552.8	556.7	567.7	567.7	567.5	560.4	552.6	545.5	553.9	555.0
1943	567.7	566.5	567.7	567.7	567.7	567.7	562.8	555.6	547.2	541.3	547.0	553.9
1944	558.1	556.8	564.5	567.7	567.7	567.7	555.1	549.4	543.9	537.4	533.5	545.1
1945	555.5	567.7	567.7	561.4	567.7	567.7	558.3	549.6	539.8	532.3	538.5	555.0
1946	553.7	543.1	534.3	524.0	567.7	562.2	556.1	549.5	542.9	539.2	547.5	555.0
1947	553.3	553.8	558.0	560.6	558.9	556.9	553.2	548.9	545.0	545.9	545.5	541.7
1948	548.5	543.1	544.2	562.3	554.0	567.7	559.6	551.0	541.5	532.6	538.2	544.9
1949	548.6	543.7	551.3	558.4	567.7	563.5	559.1	553.2	547.2	542.6	548.0	552.3
1950	562.0	567.7	567.7	567.7	567.7	567.7	559.4	548.9	538.0	529.5	567.7	567.7
1951	567.7	567.7	567.7	567.7	567.7	567.7	559.1	552.3	545.1	538.0	542.2	555.0
1952	567.7	567.7	567.7	567.7	567.7	567.7	567.7	557.4	544.5	531.4	539.7	551.0
1953	565.1	560.3	567.7	567.7	567.7	567.7	566.4	558.6	551.4	547.3	553.0	555.0
1954	561.3	567.1	567.7	567.7	567.7	567.7	558.7	555.5	554.6	555.5	559.8	555.0
1955	558.0	556.1	562.1	565.4	567.7	567.7	560.5	555.4	550.0	546.3	550.0	567.7
1956	567.7	567.7	567.7	567.7	567.7	567.7	564.7	556.5	547.3	541.9	549.7	555.0
1957	560.2	567.2	567.7	566.4	567.7	567.7	559.0	550.1	542.0	539.0	548.1	555.0
1958	565.8	567.7	567.7	567.7	567.7	567.7	567.7	563.3	555.4	550.2	555.2	555.0
1959	561.9	567.7	567.7	567.7	562.6	559.0	554.4	550.9	547.4	545.9	548.6	551.7
1960	549.7	553.9	558.0	562.1	567.7	567.7	561.4	555.5	549.6	544.6	547.8	551.1
1961	551.2	547.0	545.1	544.4	538.7	537.3	535.5	533.3	531.6	530.2	528.4	525.9
1962	522.8	542.8	540.2	548.9	548.5	567.7	561.3	558.4	554.6	555.5	558.4	555.0
1963	563.3	567.7	565.9	567.7	567.7	567.7	567.7	553.3	544.5	537.6	546.7	555.0
1964	560.7	557.0	561.6	565.5	561.6	566.3	550.5	546.5	543.0	542.0	550.5	567.7
1965	567.7	567.7	560.3	567.7	567.7	567.7	560.6	557.3	559.9	563.5	567.7	555.0
1966	551.4	541.6	544.5	558.7	562.6	557.2	547.2	542.6	541.5	540.1	544.0	555.0
1967	567.7	562.1	567.7	567.7	567.7	567.7	567.7	561.5	554.9	555.2	555.0	
1968	561.1	567.4	567.7	567.7	562.5	560.7	552.8	547.0	542.2	538.9	546.7	555.0
1969	567.7	567.7	567.7	567.7	567.7	567.7	567.7	563.4	558.3	555.2	556.8	555.0
1970	567.7	567.7	567.7	561.6	567.7	567.7	562.2	553.9	545.2	538.7	553.4	567.7
1971	566.6	562.7	566.6	565.2	565.2	567.7	566.1	567.3	563.5	562.0	561.1	555.0
1972	550.0	542.2	555.4	567.4	567.7	567.7	560.6	556.6	554.5	555.2	558.1	555.0
1973	567.7	567.7	566.8	566.3	567.7	567.7	562.4	554.4	546.8	542.5	556.0	567.7
1974	567.7	564.6	567.7	567.7	567.7	567.7	567.7	567.7	565.5	560.6	560.3	555.0
1975	555.9	563.5	567.7	560.7	566.9	567.7	567.2	567.7	567.7	567.3	567.7	555.0
1976	556.6	551.1	547.3	544.5	541.9	538.2	533.6	529.6	525.1	519.0	511.0	499.1
1977	490.0	474.0	459.0	452.4	455.7	456.4	456.9	457.1	459.4	453.4	441.6	413.6
1978	396.5	417.1	445.7	452.4	464.1	443.8	422.8	410.9	424.4	424.0	404.0	396.5
1979	420.1	448.5	504.0	537.3	563.3	567.7	564.3	554.4	542.6	531.2	535.4	544.2
1980	567.7	567.7	567.6	567.7	567.7	567.7	567.7	560.6	552.9	546.4	550.0	555.0
1981	565.8	567.5	567.7	567.7	564.2	560.5	554.0	547.4	542.3	541.3	552.0	567.7
1982	567.7	567.7	567.7	567.7	567.7	567.7	567.7	563.6	554.7	548.9	567.7	567.7
1983	567.7	567.7	567.7	567.7	567.7	567.7	567.7	567.7	567.0	566.7	567.7	567.7
1984	567.7	567.7	567.7	566.8	567.7	567.7	565.6	563.7	555.7	550.4	558.1	555.0
1985	545.8	547.4	563.0	567.7	563.2	559.7	551.3	548.5	546.6	547.6	553.8	555.0
1986	562.7	567.7	567.7	567.7	567.7	567.7	567.7	563.0	554.9	546.7	539.4	546.3
1987	552.2	550.3	553.2	553.2	546.5	541.5	541.5	541.4	540.1	532.6	526.5	523.7
1988	525.7	520.5	518.5	520.1	520.7	523.7	526.8	526.0	523.4	517.4	512.7	508.1
1989	501.0	494.8	525.9	553.8	567.7	567.7	561.9	554.8	548.9	538.2	546.5	552.8
1990	559.0	557.7	563.9	566.3	564.9	549.8	546.7	541.8	536.9	533.8	525.7	518.8
Minimum	396.5	417.1	445.7	452.4	455.7	443.8	422.8	410.9	424.4	424.0	404.0	396.5
Maximum	567.7	567.7	567.7	567.7	567.7	567.7	567.7	567.7	567.7	567.3	567.7	567.7
Average	550.1	551.2	553.8	556.3	559.5	559.1	554.5	548.8	543.3	538.9	543.2	545.8

92 250 10-9993-WSIP

Composite Program VI - GFS Eqn for Maint. of Camanche Hypol

Fish Releases per Production Goal Faxed 1-2-92 w/Ramping

Drought Planning Sequence - 1976-1977-185 TAF

## Total Pardee Releases in CFS

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1921	1,100	1,095	1,077	1,059	1,086	2,198	317	269	278	269	13	43
1922	279	659	969	407	1,873	4,207	472	321	332	321	131	406
1923	404	482	293	479	1,568	1,342	387	387	400	387	0	0
1924	0	0	0	0	58	60	58	63	73	58	0	0
1925	0	0	104	940	2,455	1,654	466	466	482	466	0	0
1926	0	0	0	0	159	165	270	161	165	159	53	149
1927	150	796	607	960	1,953	2,622	425	425	439	425	0	0
1928	102	3	558	979	2,291	304	294	294	304	294	0	0
1929	0	0	0	0	103	107	127	108	107	103	0	0
1930	0	0	0	125	346	935	337	312	323	312	0	0
1931	0	0	0	0	120	124	120	146	147	120	0	0
1932	349	523	815	388	406	1,823	358	249	257	249	70	199
1933	0	41	0	0	249	476	436	260	209	202	157	471
1934	139	0	21	0	153	158	153	153	158	153	0	0
1935	0	80	0	822	1,250	2,030	367	367	379	367	0	0
1936	0	1,851	1,100	1,100	2,417	1,923	362	357	369	357	0	0
1937	40	141	1,005	1,100	1,615	1,426	397	345	356	345	37	115
1938	225	893	2,051	1,543	4,719	3,928	593	593	613	593	0	0
1939	0	0	0	0	92	95	166	152	115	92	0	0
1940	0	1,031	1,434	1,127	3,108	1,100	383	383	396	383	0	0
1941	304	521	1,100	1,100	1,512	2,246	419	326	337	326	72	222
1942	623	944	1,100	969	2,254	3,479	527	393	406	393	132	390
1943	734	940	2,057	2,056	2,784	1,400	393	393	407	393	0	0
1944	0	0	73	27	463	839	295	261	269	261	0	1
1945	278	738	658	943	1,361	1,994	490	393	406	393	94	297
1946	722	766	933	1,079	1,163	1,100	330	295	304	295	8	21
1947	268	154	0	324	209	200	193	193	200	193	0	0
1948	0	0	0	0	1,075	1,897	404	404	418	404	0	0
1949	41	0	0	548	747	927	295	286	295	286	0	0
1950	0	499	723	1,163	1,489	2,022	448	448	463	448	1,324	4,041
1951	1,216	1,071	1,086	1,653	1,987	498	469	346	357	346	108	338
1952	812	1,240	1,317	1,777	4,295	3,943	1,033	602	622	602	0	0
1953	284	496	262	936	793	1,651	455	407	420	407	47	134
1954	0	0	529	849	991	239	356	196	184	178	119	349
1955	60	101	0	0	259	421	318	253	262	253	26	1,764
1956	2,668	1,271	1,158	1,251	2,683	2,834	458	407	421	407	49	141
1957	0	0	450	370	1,031	1,699	372	328	339	328	23	69
1958	30	1,034	1,263	2,177	2,828	3,143	519	406	420	406	50	136
1959	0	189	265	11	168	174	202	168	174	168	0	0
1960	0	0	0	0	370	515	329	319	330	319	0	0
1961	7	0	0	0	239	247	239	239	247	239	0	0
1962	0	0	542	803	745	1,116	434	283	293	283	110	320
1963	69	907	448	1,374	3,052	1,874	426	422	436	422	9	21
1964	189	315	0	0	223	289	301	223	231	223	33	2,432
1965	2,255	1,100	1,100	1,243	1,754	2,245	695	374	386	374	417	831
1966	393	309	203	0	172	178	380	205	178	172	141	432
1967	396	743	1,070	1,571	2,197	3,739	1,606	400	413	400	95	275
1968	59	107	354	241	223	230	283	223	230	223	16	51
1969	1,925	1,577	1,211	2,188	4,148	3,230	679	486	502	486	192	570
1970	1,890	1,070	1,259	972	1,212	1,546	450	381	394	381	64	393
1971	725	784	781	890	634	1,601	542	361	373	361	172	512
1972	355	320	115	0	183	727	389	209	180	174	153	447
1973	514	1,114	983	929	1,742	1,246	461	358	370	358	94	503
1974	1,134	805	1,476	1,573	1,831	1,893	526	435	362	350	103	293
1975	12	0	753	1,100	1,100	2,488	626	412	421	352	260	653
1976	0	0	0	0	17	18	17	17	42	17	0	0
1977	0	0	0	0	0	0	0	0	0	0	0	0
1978	0	0	0	0	0	184	181	194	101	104	152	99
1979	22	0	0	104	464	971	464	464	479	464	0	0
1980	1,596	2,321	1,499	1,100	1,720	2,396	795	371	383	371	20	54
1981	0	113	272	325	199	205	296	199	205	199	49	454
1982	1,464	2,617	2,290	3,808	4,225	2,584	793	566	585	566	371	1,633
1983	1,667	2,355	3,761	2,031	2,985	5,784	2,911	658	530	512	1,574	2,612
1984	1,444	1,180	1,210	999	1,883	1,371	541	403	417	403	141	410
1985	295	143	0	478	244	170	300	173	170	164	76	222
1986	236	4,321	2,852	1,732	2,709	1,763	426	426	440	426	0	0
1987	0	0	0	0	121	125	121	121	125	121	0	0
1988	0	0	0	0	87	90	87	116	130	87	0	0
1989	9	0	0	169	913	834	415	406	419	406	0	0
1990	37	87	0	0	298	781	298	298	308	298	0	0
Minimum	0	0	0	0	0	0	0	0	0	0	0	0
Maximum	2,668	4,321	3,761	3,808	4,719	5,784	2,911	658	622	602	1,574	4,041
Average	393	569	646	741	1,283	1,397	435	315	318	306	97	321

**92 250 10-9993-WSIP**  
**Composite Program VI - GFS Eqn for Maint. of Camanche Hypol**  
**Fish Releases per Production Goal Faxed 1-2-92 w/Ramping**  
**Drought Planning Sequence - 1976-1977-185 TAF**

**Camanche Reservoir Storage in Acre-Feet**

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1921	339,918	363,420	390,468	430,879	416,806	430,879	397,618	368,062	349,243	332,567	310,924	297,771
1922	305,955	337,190	386,866	392,834	334,188	430,879	400,343	367,107	344,710	325,432	312,419	320,552
1923	318,998	323,732	331,098	343,971	385,414	395,731	371,511	353,838	347,141	341,028	318,326	299,669
1924	294,381	290,250	283,783	269,780	243,563	225,784	213,297	201,316	197,090	190,490	174,928	168,047
1925	158,027	151,855	148,170	187,904	296,216	337,030	329,615	328,624	337,767	349,329	327,212	308,669
1926	303,209	300,553	293,569	280,954	259,129	243,911	238,373	226,433	224,365	222,003	212,493	210,666
1927	209,902	250,186	275,461	315,912	367,245	430,879	398,374	372,472	357,483	352,304	329,116	311,104
1928	305,130	296,145	273,355	315,177	412,307	372,230	353,992	342,258	340,683	341,106	320,399	302,571
1929	297,647	293,327	288,497	274,970	251,529	237,289	228,172	218,365	215,709	211,011	194,669	186,275
1930	182,684	178,632	173,993	168,240	158,677	189,910	189,007	186,841	194,487	201,171	185,615	176,166
1931	171,386	166,625	160,253	146,822	145,438	132,365	126,221	121,037	122,125	122,152	112,951	110,822
1932	128,346	157,184	199,233	215,008	209,230	292,719	292,114	285,065	288,091	290,216	278,091	277,177
1933	273,539	270,537	263,656	249,657	233,944	237,356	242,011	236,069	236,589	236,846	229,781	254,474
1934	258,613	257,926	252,173	237,982	218,323	206,653	199,446	192,675	193,490	192,335	177,519	167,086
1935	156,665	149,997	138,776	178,153	217,224	312,720	305,956	302,429	307,542	317,417	301,166	287,633
1936	280,616	301,269	338,011	366,149	408,948	430,879	395,599	366,632	348,412	335,521	312,635	295,573
1937	288,622	296,421	327,194	375,326	414,537	425,332	396,809	371,619	357,016	348,188	329,101	263,759
1938	264,555	258,403	284,328	231,453	335,152	430,879	399,562	375,060	362,093	357,180	332,545	311,307
1939	305,596	301,974	297,397	283,291	259,953	244,114	237,329	230,121	228,258	223,131	206,903	197,851
1940	191,088	245,606	297,290	346,784	430,893	426,610	402,069	384,078	376,493	368,260	345,769	330,304
1941	322,590	305,735	336,669	388,655	399,000	430,879	394,984	360,021	335,965	322,986	305,303	295,652
1942	257,378	254,364	310,936	351,742	349,140	430,879	397,130	361,801	337,649	323,321	299,879	297,642
1943	255,389	253,071	273,355	351,129	413,952	420,139	388,461	363,447	349,220	340,061	316,954	297,676
1944	287,016	281,251	275,652	260,229	249,355	274,075	263,245	253,564	252,587	256,301	242,887	229,836
1945	234,150	271,150	301,561	339,817	364,702	410,917	389,091	367,812	357,061	350,926	327,217	281,665
1946	288,246	320,647	366,421	412,198	430,733	427,823	401,451	379,449	367,965	355,867	335,478	318,162
1947	323,010	320,603	308,926	310,110	283,082	269,758	252,709	238,981	233,844	234,190	218,322	204,429
1948	191,885	181,137	170,006	154,250	182,250	270,139	266,019	265,107	272,744	284,849	268,295	255,414
1949	245,756	235,294	227,511	241,960	248,704	278,586	267,717	259,572	259,958	264,462	248,487	234,563
1950	224,057	243,325	274,355	324,201	356,572	403,061	378,120	359,870	352,668	349,752	231,453	231,453
1951	231,453	231,453	273,355	351,129	425,023	391,341	378,726	365,017	361,516	355,909	341,760	328,570
1952	301,269	301,269	319,236	240,437	306,213	422,935	403,906	365,280	339,431	332,537	307,710	287,922
1953	296,144	263,068	267,335	306,131	306,733	342,558	329,389	319,766	320,250	317,949	298,925	288,523
1954	276,667	266,873	288,540	321,629	342,663	331,401	323,855	309,703	303,165	300,858	292,301	302,599
1955	300,366	295,523	282,403	265,834	242,215	242,188	233,011	223,134	221,732	224,542	210,261	244,416
1956	231,453	247,430	300,244	352,094	378,019	430,879	392,002	356,809	333,061	318,035	296,951	285,699
1957	275,333	265,963	285,522	290,183	311,642	354,924	341,582	332,012	332,636	335,770	314,735	301,129
1958	291,848	301,269	327,194	354,084	363,067	430,879	390,107	349,226	319,938	304,134	283,281	271,076
1959	266,536	277,188	287,490	274,550	253,172	238,584	228,911	217,468	216,965	214,472	198,117	188,979
1960	184,137	180,826	176,177	163,129	154,863	161,307	160,228	158,756	167,059	174,204	159,332	150,222
1961	145,312	140,409	134,368	121,308	127,453	121,770	120,808	120,186	121,721	133,881	124,355	118,166
1962	114,716	118,872	149,094	189,650	204,146	245,769	250,249	245,653	251,035	257,693	248,161	259,793
1963	251,662	233,443	249,782	317,950	406,958	430,879	395,830	367,146	349,469	340,793	305,057	287,061
1964	288,925	294,754	282,132	268,252	250,925	243,579	233,855	222,126	219,052	221,151	207,409	240,437
1965	244,958	257,559	312,240	363,248	385,615	423,952	392,023	347,580	314,106	301,274	293,130	327,195
1966	335,826	344,440	343,726	325,605	296,315	281,560	275,957	262,825	256,302	253,930	247,774	263,831
1967	285,726	313,379	326,109	354,867	288,669	406,879	420,718	367,014	325,293	306,574	290,091	287,483
1968	281,749	279,223	292,146	288,301	262,359	250,919	239,599	228,025	224,835	226,258	212,656	204,072
1969	294,035	301,088	326,109	314,413	352,094	430,879	394,693	353,635	324,471	310,557	298,226	313,503
1970	231,212	231,212	280,107	320,466	346,498	375,705	362,085	350,713	349,510	348,925	319,335	301,088
1971	303,571	312,000	328,541	363,436	347,825	374,039	359,714	340,783	332,324	325,036	313,799	328,390
1972	338,326	346,875	341,470	323,947	295,268	313,139	307,777	294,600	288,702	286,509	281,328	295,671
1973	301,088	301,088	328,027	365,229	414,692	416,981	394,905	373,058	361,768	353,864	281,908	263,467
1974	252,977	283,809	319,296	371,387	399,904	424,954	391,179	357,429	329,523	315,514	299,481	298,938
1975	288,156	282,031	321,293	369,648	358,319	413,892	380,654	341,510	312,591	298,923	292,137	312,953
1976	305,965	300,897	294,170	280,569	251,893	231,599	216,544	202,210	196,261	186,358	170,545	159,159
1977	150,443	142,570	133,992	120,229	112,019	91,860	78,999	65,640	58,784	52,113	42,740	36,486
1978	32,948	30,266	25,874	19,181	11,820	4,000	4,000	4,000	4,000	4,000	4,000	4,000
1979	4,000	6,502	4,186	4,000	23,222	58,302	67,052	75,741	93,685	113,079	104,159	99,132
1980	196,671	248,696	308,806	355,777	372,653	421,950	398,803	355,553	323,609	310,826	289,414	274,146
1981	265,377	261,618	270,671	276,531	257,131	244,383	238,532	225,262	220,606	220,983	210,397	226,535
1982	245,863	231,152	270,642	292,045	374,401	420,464	381,560	335,759	304,309	290,730	236,759	243,150
1983	270,401	281,072	317,487	331,475	247,310	369,638	430,893	361,508	297,191	269,117	231,152	231,152
1984	231,152	240,075	290,357	331,973	388,328	396,259	377,226	356,232	345,729	339,743	318,293	325,743
1985	332,258	330,314	321,520	331,545	306,459	291,212	280,542	265,394	258,638	256,266	247,806	249,288
1986	251,719	236,156	272,873	351,003	407,259	428,072	391,198	361,135	344,258	332,639	308,189	287,092
1987	281,242	278,693	275,755	261,521	239,270	225,418	216,088	207,193	205,726	202,628	186,962	179,360
1988	175,305	169,835	163,003	150,306	146,872	131,764	123,671	116,697	116,786	114,680	106,103	101,303
1989	98,436	95,845	94,918	98,848	124,494	150,056	154,377	158,310	172,822	186,223	171,247	159,800
1990	154,853	1										

## Camanche Reservoir Elevation in Feet

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1921	222.9	226.3	230.1	235.5	233.6	235.5	231.1	227.0	224.2	221.8	218.5	216.4
1922	217.7	222.5	229.6	230.4	222.0	235.5	231.4	226.8	223.6	220.7	218.7	220.0
1923	219.7	220.4	221.6	223.5	229.4	230.8	227.4	224.9	223.9	223.0	219.6	216.7
1924	215.9	215.2	214.2	211.8	207.3	204.1	201.8	199.6	198.7	197.3	194.0	192.5
1925	190.4	189.0	188.2	196.7	216.2	222.4	221.3	221.2	222.6	224.3	221.0	218.1
1926	217.3	216.9	215.7	213.7	210.0	207.4	206.4	204.3	203.9	203.4	201.7	201.3
1927	201.2	208.5	212.8	219.3	226.8	235.5	231.2	227.6	225.4	224.7	221.3	218.5
1928	217.6	216.1	212.4	219.1	233.0	227.5	224.9	223.2	223.0	223.1	219.9	217.2
1929	216.4	215.7	214.9	212.7	208.7	206.2	204.6	202.8	202.3	201.4	198.1	196.4
1930	195.6	194.8	193.8	192.6	190.5	197.2	197.0	196.5	198.1	199.5	196.3	194.3
1931	193.5	192.2	190.9	187.8	187.5	184.4	182.9	181.5	181.8	181.8	179.3	178.7
1932	183.4	190.2	199.1	202.2	201.1	215.6	215.5	214.4	214.9	215.2	213.2	213.1
1933	212.5	212.0	210.8	208.4	205.6	206.2	207.1	206.0	206.1	206.1	204.9	209.2
1934	209.9	209.8	208.8	206.3	202.8	200.6	199.2	197.7	197.9	197.7	194.6	192.3
1935	190.1	188.6	186.0	194.7	202.6	218.8	217.7	217.1	218.0	219.5	216.9	214.8
1936	213.6	217.0	222.6	226.7	232.6	235.5	230.8	226.7	224.1	222.2	218.7	216.1
1937	214.9	216.2	221.0	228.0	233.3	234.8	230.9	227.5	225.4	224.1	221.3	210.8
1938	211.0	209.9	214.2	205.2	222.2	235.5	231.3	227.9	226.1	225.4	221.8	218.5
1939	217.6	217.1	216.3	214.1	210.2	207.4	206.2	204.9	204.6	203.7	200.6	198.8
1940	197.4	207.7	216.3	223.9	235.5	234.9	231.7	229.2	228.1	227.0	223.7	221.4
1941	220.3	217.7	222.4	229.8	231.2	235.5	230.7	225.8	222.3	220.3	217.6	216.1
1942	209.7	209.2	218.5	224.6	224.2	235.5	231.0	226.1	222.5	220.4	216.7	216.4
1943	209.4	209.0	212.4	224.5	233.2	234.1	229.8	226.3	224.2	222.9	219.4	216.4
1944	214.7	213.7	212.8	210.2	208.3	212.6	210.7	209.1	208.9	209.5	207.2	204.9
1945	205.7	212.1	217.0	222.9	226.5	232.8	229.9	226.9	225.4	224.5	221.0	213.8
1946	214.9	220.0	226.7	233.0	235.5	235.1	231.6	228.6	226.9	225.2	222.2	219.6
1947	220.3	220.0	218.2	218.4	214.0	211.8	208.9	206.5	205.6	205.7	202.8	200.2
1948	197.6	195.3	193.0	189.5	195.5	211.9	211.2	211.1	212.3	214.3	211.6	209.4
1949	207.7	205.9	204.5	207.0	208.2	213.3	211.5	210.1	210.2	210.9	208.2	205.7
1950	203.8	207.3	212.6	220.5	225.3	231.8	228.4	225.8	224.7	224.3	205.2	205.2
1951	205.2	205.2	212.4	224.5	234.7	230.2	228.5	226.5	226.0	225.2	223.1	221.2
1952	217.0	217.0	219.8	206.8	217.7	234.4	231.9	226.6	222.8	221.8	218.0	214.8
1953	216.1	210.7	211.4	217.7	217.8	223.3	221.3	219.8	219.9	219.6	216.6	214.9
1954	213.0	211.3	214.9	220.1	223.3	221.6	220.5	218.3	217.3	216.9	215.5	217.2
1955	216.8	216.1	213.9	211.2	207.1	207.1	205.4	203.7	203.4	203.9	201.3	207.5
1956	205.2	208.0	216.8	224.7	228.4	235.5	230.3	225.3	221.9	219.6	216.3	214.5
1957	212.8	211.2	214.4	215.2	218.6	225.1	223.1	221.7	221.8	222.3	219.1	216.9
1958	215.5	217.0	221.0	225.0	226.2	235.5	230.0	224.2	219.9	217.4	214.1	212.1
1959	211.3	213.1	214.8	212.6	209.0	206.4	204.7	202.6	202.5	202.1	198.9	197.0
1960	195.9	195.2	194.3	191.5	189.7	191.1	190.9	190.5	192.3	193.9	190.7	188.6
1961	187.5	186.3	184.9	181.6	183.2	181.7	181.4	181.3	183.0	184.8	182.4	180.7
1962	179.8	180.9	188.4	197.1	200.1	207.7	208.5	207.7	208.6	209.8	208.1	210.1
1963	208.7	205.5	208.4	219.6	232.3	235.5	230.8	226.8	224.3	223.0	217.6	214.7
1964	215.0	215.9	213.9	211.6	208.6	207.3	205.6	203.5	202.9	203.3	200.7	206.8
1965	207.6	209.8	218.7	226.3	229.4	234.6	230.3	224.0	219.0	217.0	215.7	221.0
1966	222.3	223.5	223.4	220.7	216.2	213.8	212.9	210.7	209.5	209.1	208.1	210.8
1967	214.5	218.9	220.8	225.1	214.9	232.3	234.1	226.8	220.7	217.8	215.2	214.8
1968	213.8	213.4	215.5	214.9	210.6	208.6	206.6	204.5	204.0	204.2	201.7	200.1
1969	215.8	216.9	220.8	219.0	224.7	235.5	230.7	224.9	220.6	218.4	216.5	218.9
1970	205.1	205.1	213.6	219.9	223.8	228.0	226.1	224.5	224.3	224.2	219.8	216.9
1971	217.3	218.6	221.2	226.3	224.0	227.8	225.8	223.0	221.7	220.6	218.9	221.2
1972	222.6	223.9	223.1	220.5	216.0	218.8	218.0	215.9	215.0	214.6	213.8	216.1
1973	216.9	216.9	221.1	226.5	233.3	233.6	230.7	227.7	226.1	224.9	213.8	210.8
1974	209.0	214.2	219.8	227.4	231.4	234.7	230.2	225.4	221.3	219.2	216.7	216.6
1975	214.9	213.9	220.1	227.2	225.6	233.2	228.7	223.1	218.7	216.6	215.5	218.8
1976	217.7	216.9	215.8	213.6	208.8	205.2	202.4	199.7	198.5	196.4	193.1	190.6
1977	188.7	186.9	184.8	181.3	179.0	173.0	168.6	163.6	160.9	157.5	152.3	148.4
1978	146.1	144.2	140.9	135.2	128.0	118.9	118.9	118.9	118.9	118.9	118.9	118.9
1979	118.9	122.0	119.2	118.9	138.7	160.7	164.2	167.5	173.6	179.3	176.8	175.3
1980	198.6	208.2	218.1	225.2	227.6	234.3	231.2	225.2	220.4	218.5	215.1	212.6
1981	211.1	210.5	212.0	213.0	209.7	207.5	206.4	204.0	203.2	203.3	201.3	204.3
1982	207.7	205.1	212.0	215.5	227.8	234.1	228.8	222.3	217.4	215.3	206.1	207.3
1983	211.9	213.7	219.5	221.6	208.0	227.2	235.5	226.0	216.3	211.7	205.1	205.1
1984	205.1	206.7	215.2	221.7	229.8	230.9	228.2	225.3	223.7	222.9	219.6	220.8
1985	221.7	221.4	220.1	221.6	217.8	215.4	213.6	211.1	209.9	209.5	208.1	208.3
1986	208.8	206.0	212.4	224.5	232.4	235.1	230.2	226.0	223.5	221.8	218.1	214.7
1987	213.7	213.3	212.8	210.4	206.6	204.1	202.4	200.7	200.4	199.8	196.5	194.9
1988	194.1	192.9	191.5	188.6	187.9	184.2	182.2	180.3	180.4	179.8	177.4	175.9
1989	175.1	174.2	174.0	175.2	182.4	188.6	189.6	190.4	193.6	196.4	193.2	190.8
1990	189.7	189.2	187.2	184.0	181.6	188.0	188.5	189.1	191.3	192.9	189.4	186.9

Minimum

118.9

122.0

119.2

118.9

128.0

118.9

118.9

118.9

118.9

118.9

118.9

118.9

118.9

118.9

Maximum

222.9

226.3

230.1

235.5

235.5

235.5

235.5

229.2

228.1

227.0

223.7

221.4

Average

206.2

206.8

209.1

211.4

213.2

216.9

214.7

212.0

210.8

210.2

206.9

205.9

92 250 10-9993-WSIP  
 Composite Program V1 - GFS Eqn for Maint. of Camanche Hypol  
 Fish Releases per Production Goal Faxed 1-2-92 w/Ramping  
 Drought Planning Sequence - 1976-1977-185 TAF

Total Camanche Releases in CFS

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1921	666	747	682	355	1,267	1,895	771	669	536	506	356	300
1922	185	199	201	278	2,782	2,517	882	780	647	602	356	335
1923	485	434	185	278	846	1,104	697	596	463	451	356	300
1924	85	74	100	210	441	309	200	200	100	150	253	140
1925	200	200	201	278	658	912	509	408	271	247	356	300
1926	101	92	101	208	472	368	295	294	152	178	253	173
1927	200	200	200	278	1,070	1,489	867	765	632	488	392	300
1928	201	200	998	278	658	912	509	408	271	247	356	300
1929	102	92	86	210	441	309	211	207	105	150	253	140
1930	92	92	102	208	472	368	295	294	152	178	253	140
1931	92	92	100	210	116	309	174	188	96	100	153	98
1932	84	107	124	106	472	368	295	294	152	178	253	214
1933	95	94	112	208	472	368	295	294	152	178	253	140
1934	92	92	100	210	441	309	211	207	105	150	253	173
1935	200	200	201	208	577	371	402	352	237	178	256	220
1936	200	1,841	506	611	1,672	1,498	849	747	614	538	356	300
1937	201	182	678	278	924	1,181	775	673	540	454	356	1,194
1938	240	1,227	1,758	2,419	2,989	2,254	1,016	910	770	649	390	340
1939	102	74	86	210	441	309	211	207	105	150	253	140
1940	200	200	658	278	1,688	1,102	695	594	461	486	356	300
1941	485	888	653	278	1,291	1,642	916	815	682	503	356	421
1942	1,373	1,045	198	292	2,263	2,039	989	886	751	587	546	437
1943	1,535	1,018	1,855	744	1,708	1,229	823	720	585	510	366	312
1944	185	182	185	278	603	371	402	352	237	178	256	220
1945	200	200	200	278	909	1,166	760	658	525	475	504	1,085
1946	616	200	200	278	821	1,079	672	570	437	459	356	300
1947	185	200	200	278	603	371	402	352	237	178	256	220
1948	200	200	200	278	603	371	402	352	237	178	256	220
1949	200	200	200	278	603	371	402	352	237	178	256	220
1950	226	223	228	308	916	1,175	769	665	528	485	3,367	4,142
1951	1,317	1,104	415	324	740	996	591	489	355	411	356	625
1952	1,407	1,295	1,118	3,089	3,183	1,919	1,255	1,149	1,006	674	403	356
1953	188	1,076	185	278	740	996	591	489	355	416	356	300
1954	201	182	200	278	603	371	402	352	237	178	256	220
1955	200	200	200	278	603	371	402	352	237	178	256	1,379
1956	3,053	1,002	284	366	2,233	1,880	1,003	900	763	626	376	323
1957	185	182	185	278	658	912	509	408	271	247	356	300
1958	224	995	1,014	1,910	2,642	1,938	1,095	991	854	625	377	324
1959	102	74	87	208	472	368	295	294	152	178	253	140
1960	92	92	101	208	472	368	295	294	152	178	253	140
1961	92	92	100	210	116	309	211	207	105	100	153	98
1962	56	48	71	106	472	368	295	294	152	178	253	140
1963	201	1,309	210	278	1,562	1,405	910	808	675	545	632	300
1964	201	200	200	208	472	368	394	352	237	178	256	2,122
1965	2,283	875	210	386	1,336	1,535	1,129	1,026	891	549	567	309
1966	280	182	200	278	603	371	402	352	237	178	256	220
1967	204	260	913	1,201	3,231	1,702	1,296	1,192	1,055	674	374	320
1968	201	185	185	278	603	371	402	352	237	178	256	220
1969	643	1,653	830	2,391	3,484	1,842	1,180	1,075	934	690	394	344
1970	3,360	1,083	521	278	740	996	591	489	355	359	610	777
1971	696	629	539	278	843	1,100	694	592	459	442	356	335
1972	191	182	185	278	603	371	402	352	237	178	256	220
1973	566	1,267	620	278	883	1,141	734	632	499	482	1,327	883
1974	1,370	259	931	707	1,313	1,412	1,006	904	771	557	356	300
1975	185	182	185	278	1,233	1,491	1,084	982	849	561	356	300
1976	102	92	100	210	441	309	200	200	100	150	253	173
1977	139	140	135	213	113	309	174	188	96	100	153	98
1978	56	48	70	108	113	309	174	188	96	100	153	98
1979	56	48	71	106	144	368	295	294	152	138	153	98
1980	116	1,514	546	294	1,399	1,502	1,096	994	861	542	356	300
1981	201	182	185	208	472	368	326	352	237	178	256	220
1982	1,279	2,975	1,789	3,557	2,841	1,746	1,342	1,232	1,086	786	1,355	1,664
1983	1,431	2,294	3,437	1,813	4,316	3,672	1,830	1,706	1,559	942	2,303	2,750
1984	1,470	1,056	397	278	916	1,174	768	666	533	482	557	300
1985	185	182	185	278	603	371	402	352	237	178	256	220
1986	236	4,797	2,382	438	1,745	1,346	940	835	696	577	387	336
1987	102	74	86	210	441	309	211	207	105	150	253	140
1988	92	92	101	210	116	309	174	188	96	100	153	98
1989	56	48	71	106	470	368	295	294	152	178	253	173
1990	141	141	145	213	438	309	211	207	105	150	253	173
Minimum	56	48	70	106	113	309	174	188	96	100	153	98
Maximum	3,360	4,797	3,437	3,557	4,316	3,672	1,830	1,706	1,559	942	3,367	4,142
Average	460	558	438	479	1,052	939	604	543	417	347	419	442

## Flow at Victor (Bruella Rd) CFS

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1921	628	711	638	231	1,028	1,611	484	434	342	349	337	274
1922	164	181	157	231	2,543	2,234	595	545	453	446	337	294
1923	448	398	157	231	607	821	411	361	269	294	337	274
1924	172	163	171	178	406	220	163	165	73	126	237	197
1925	178	181	173	231	533	747	337	286	195	204	337	274
1926	188	181	172	176	437	280	259	259	126	154	237	195
1927	179	181	172	231	831	1,206	580	530	438	331	356	274
1928	180	181	954	231	533	747	337	286	195	204	337	274
1929	188	181	156	178	406	220	175	173	79	126	237	197
1930	178	181	173	176	437	280	259	259	126	154	237	197
1931	178	181	171	178	81	220	138	153	70	77	137	120
1932	95	89	100	74	437	280	259	259	126	154	237	195
1933	182	182	182	176	437	280	259	259	126	154	237	197
1934	178	181	171	178	406	220	175	173	79	126	237	195
1935	178	181	173	176	533	283	317	286	195	154	237	195
1936	178	1,804	461	446	1,433	1,215	563	512	420	381	337	274
1937	180	163	634	231	685	898	488	438	346	297	337	1,153
1938	207	1,180	1,700	2,274	2,735	1,955	713	660	564	483	361	303
1939	188	163	156	178	406	220	175	173	79	126	237	197
1940	178	181	630	231	1,449	819	409	358	267	329	337	274
1941	448	852	609	231	1,052	1,359	630	580	488	346	337	380
1942	1,332	1,006	166	241	2,020	1,751	698	647	554	428	506	392
1943	1,494	978	1,807	576	1,464	941	531	480	387	350	344	283
1944	164	163	157	231	533	283	317	286	195	154	237	195
1945	178	181	172	231	670	883	473	423	331	319	467	1,044
1946	579	181	172	231	582	796	386	335	244	302	337	274
1947	164	181	172	231	533	283	317	286	195	154	237	195
1948	178	181	172	231	533	283	317	286	195	154	237	195
1949	178	181	172	231	533	283	317	286	195	154	237	195
1950	197	197	191	253	668	882	473	421	326	322	3,324	4,093
1951	1,280	1,067	370	231	533	747	337	286	195	254	337	583
1952	1,353	1,244	1,055	2,905	2,923	1,614	947	893	794	504	370	314
1953	167	1,039	157	231	533	747	337	286	195	260	337	274
1954	180	163	172	231	533	283	317	286	195	154	237	195
1955	178	181	172	231	533	283	317	286	195	154	237	1,338
1956	3,009	959	232	251	1,986	1,587	708	656	561	463	351	291
1957	164	163	157	231	533	747	337	286	195	204	337	274
1958	196	952	961	1,737	2,393	1,645	799	747	652	463	351	292
1959	188	163	157	176	437	280	259	259	126	154	237	197
1960	178	181	172	176	437	280	259	259	126	154	237	197
1961	178	181	171	178	81	220	175	173	79	77	137	120
1962	95	89	100	74	437	280	259	259	126	154	237	197
1963	180	1,290	182	231	1,323	1,122	623	573	481	389	596	274
1964	180	181	172	176	437	280	317	286	195	154	237	2,097
1965	2,243	836	179	252	1,094	1,248	838	787	694	390	529	281
1966	243	163	172	231	533	283	317	286	195	154	237	195
1967	177	221	861	1,030	2,984	1,410	1,001	949	855	513	349	289
1968	180	167	157	231	533	283	317	286	195	154	237	195
1969	592	1,604	771	2,211	3,229	1,542	876	823	726	523	363	306
1970	3,323	1,047	477	231	533	747	337	286	195	235	574	735
1971	659	593	495	231	604	817	407	357	265	285	337	294
1972	170	163	157	231	533	283	317	286	195	154	237	195
1973	528	1,231	576	231	644	858	448	397	305	325	1,291	842
1974	1,332	223	886	543	1,074	1,129	719	669	577	400	337	274
1975	164	163	157	231	994	1,208	798	747	655	404	337	274
1976	188	181	171	178	406	220	163	165	73	126	237	195
1977	178	181	165	181	78	220	138	153	70	77	137	120
1978	95	89	99	76	78	220	138	153	70	77	137	120
1979	95	89	100	74	109	280	259	259	126	114	137	120
1980	95	1,477	502	231	1,160	1,219	809	759	667	385	337	274
1981	180	163	157	176	437	280	289	286	195	154	237	195
1982	1,217	2,917	1,718	3,364	2,572	1,431	1,023	967	866	611	1,298	1,598
1983	1,369	2,235	3,366	1,620	4,047	3,357	1,511	1,440	1,339	766	2,247	2,684
1984	1,432	1,019	352	231	677	891	481	431	339	326	520	274
1985	164	163	157	231	533	283	317	286	195	154	237	195
1986	204	4,751	2,326	262	1,493	1,048	639	586	490	411	359	300
1987	188	163	156	178	406	220	175	173	79	126	237	197
1988	178	181	172	178	81	220	138	153	70	77	137	120
1989	95	89	100	74	435	280	259	259	126	154	237	195
1990	180	182	175	181	403	220	175	173	79	126	237	195
Minimum	95	89	99	74	78	220	138	153	70	77	137	120
Maximum	3,323	4,751	3,366	3,364	4,047	3,357	1,511	1,440	1,339	766	3,324	4,093
Average	459	558	428	412	911	754	435	404	306	259	396	430

92 250 10-9993-WSIP  
 Composite Program VI - GFS Eqn for Maint. of Camanche Hypol  
 Fish Releases per Production Goal Faxed 1-2-92 w/Ramping  
 Drought Planning Sequence - 1976-1977-185 TAF

Flow Below Lodi Lake in CFS

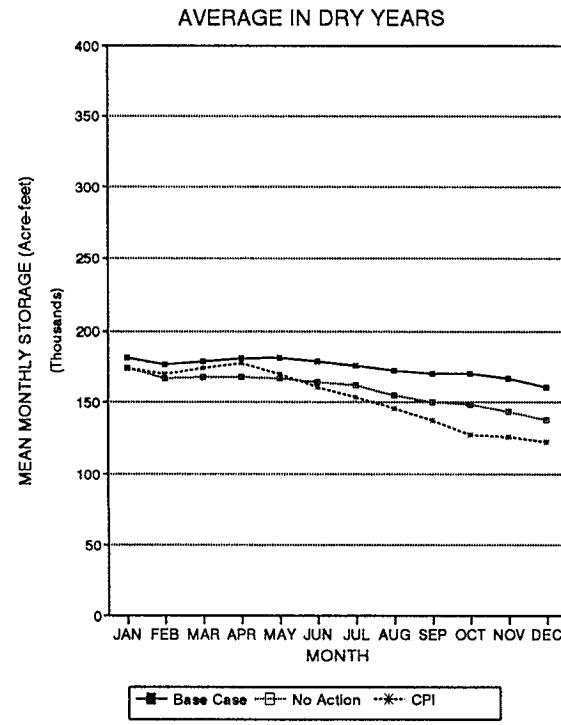
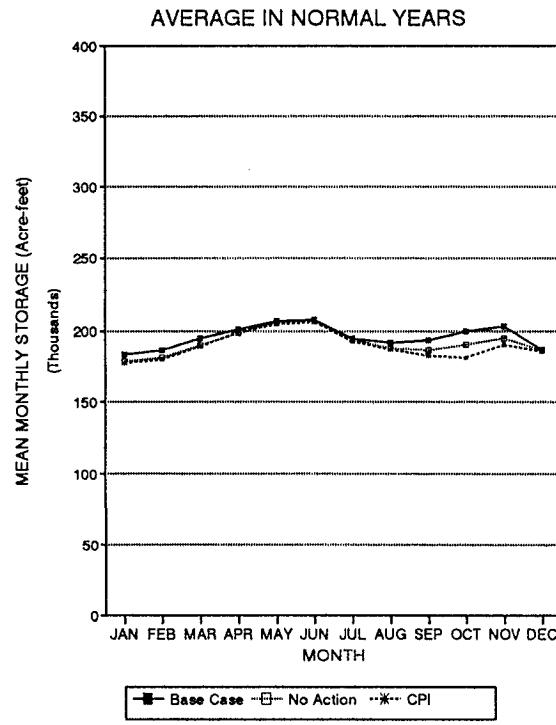
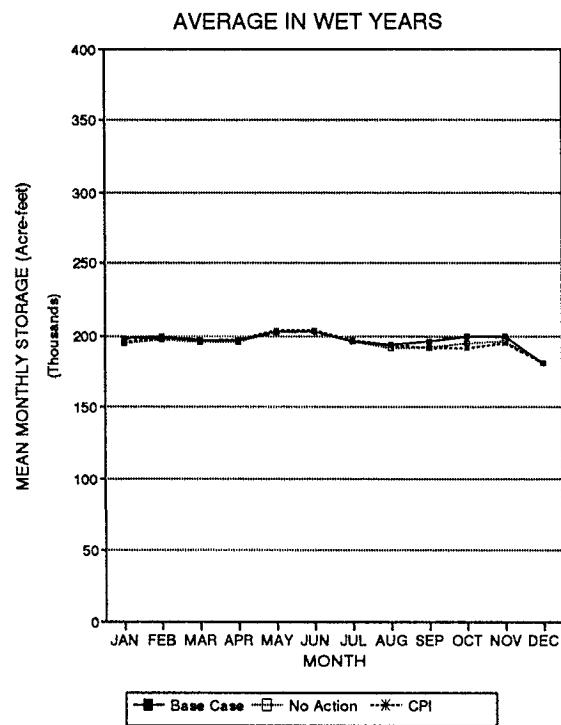
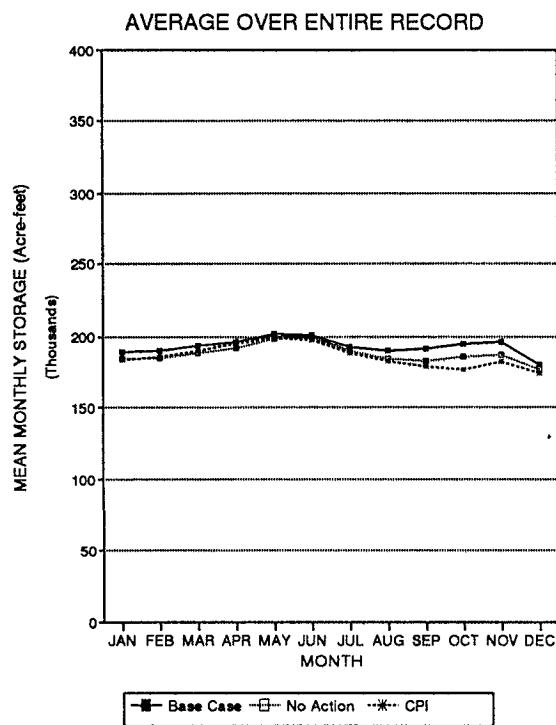
YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1921	583	671	580	124	843	1,362	196	168	166	254	299	228
1922	118	140	99	124	2,358	1,984	307	280	277	351	299	248
1923	402	357	99	124	422	571	122	95	93	199	299	228
1924	126	123	114	124	348	30	43	31	22	68	199	151
1925	133	141	115	124	348	497	48	21	19	109	299	228
1926	142	141	114	122	348	30	29	21	19	59	199	149
1927	133	141	114	124	645	957	292	264	262	236	319	228
1928	134	141	896	124	348	497	48	21	19	109	299	228
1929	142	141	99	124	348	30	29	21	19	68	199	151
1930	133	141	115	122	348	30	29	21	19	59	199	151
1931	133	141	114	124	23	30	18	19	19	19	99	74
1932	49	49	49	19	348	30	29	21	19	59	199	149
1933	136	142	125	122	348	30	29	21	19	59	199	151
1934	133	141	114	124	348	30	29	21	19	68	199	149
1935	133	141	115	122	348	33	29	21	19	59	199	149
1936	133	1,764	404	339	1,247	965	274	247	244	286	299	228
1937	134	123	576	124	499	648	200	173	170	202	299	1,107
1938	133	1,114	1,611	2,133	2,514	1,668	387	360	357	366	299	228
1939	142	123	99	124	348	30	29	21	19	68	199	151
1940	133	141	572	124	1,264	569	120	93	91	234	299	228
1941	402	812	551	124	866	1,109	341	314	312	251	299	334
1942	1,277	958	99	124	1,824	1,490	398	371	369	326	462	338
1943	1,440	931	1,740	458	1,268	680	232	204	202	249	299	228
1944	118	123	99	124	348	33	29	21	19	59	199	149
1945	133	141	114	124	484	633	185	158	155	223	430	998
1946	533	141	114	124	397	546	97	70	68	207	299	228
1947	118	141	114	124	348	33	29	21	19	59	199	149
1948	133	141	114	124	348	33	29	21	19	59	199	149
1949	133	141	114	124	348	33	29	21	19	59	199	149
1950	133	141	114	124	460	609	160	133	131	213	3,272	4,029
1951	1,234	1,027	313	124	348	497	48	21	19	159	299	537
1952	1,268	1,169	954	2,752	2,689	1,313	606	579	577	379	299	228
1953	121	999	99	124	348	497	48	21	19	164	299	228
1954	134	123	114	124	348	33	29	21	19	59	199	149
1955	133	141	114	124	348	33	29	21	19	59	199	1,292
1956	2,946	904	157	124	1,780	1,316	397	370	368	355	299	228
1957	118	123	99	124	348	497	48	21	19	109	299	228
1958	133	896	885	1,609	2,187	1,373	488	460	458	354	299	228
1959	142	123	99	122	348	30	29	21	19	59	199	151
1960	133	141	114	122	348	30	29	21	19	59	199	151
1961	133	141	114	124	23	30	29	21	19	19	99	74
1962	49	49	49	19	348	30	29	21	19	59	199	151
1963	134	1,250	125	124	1,137	872	335	307	305	293	558	228
1964	134	141	114	122	348	30	29	21	19	59	199	2,051
1965	2,190	789	114	136	900	989	541	514	511	289	486	228
1966	197	123	114	124	348	33	29	21	19	59	199	149
1967	116	168	788	905	2,781	1,142	693	666	663	406	299	228
1968	134	126	99	124	348	33	29	21	19	59	199	149
1969	515	1,536	679	2,067	3,005	1,252	547	519	517	403	299	228
1970	3,277	1,007	419	124	348	497	48	21	19	140	536	689
1971	613	553	437	124	418	568	119	92	89	190	299	248
1972	124	123	99	124	348	33	29	21	19	59	199	149
1973	483	1,191	518	124	459	608	159	132	129	230	1,253	796
1974	1,287	183	829	435	889	879	431	403	401	305	299	228
1975	118	123	99	124	809	958	509	482	480	309	299	228
1976	142	141	114	124	348	30	43	31	22	68	199	149
1977	133	141	115	124	21	30	18	19	19	19	99	74
1978	49	49	49	19	21	30	18	19	19	19	99	74
1979	49	49	49	19	23	30	29	21	19	19	99	74
1980	49	1,437	444	124	974	969	521	494	491	290	299	228
1981	134	123	99	122	348	30	29	21	19	59	199	149
1982	1,114	2,826	1,598	3,189	2,315	1,107	658	631	629	471	1,212	1,494
1983	1,266	2,144	3,245	1,445	3,790	3,032	1,147	1,104	1,102	626	2,161	2,580
1984	1,387	979	295	124	492	641	192	165	163	231	483	228
1985	118	123	99	124	348	33	29	21	19	59	199	149
1986	133	4,688	2,240	124	1,276	765	316	289	287	296	299	228
1987	142	123	99	124	348	30	29	21	19	68	199	151
1988	133	141	115	124	23	30	18	19	19	19	99	74
1989	49	49	49	19	348	30	29	21	19	59	199	149
1990	134	142	125	124	346	30	29	21	19	68	199	149
Minimum	49	49	49	19	21	30	18	19	19	19	99	74
Maximum	3,277	4,688	3,245	3,189	3,790	3,032	1,147	1,104	1,102	626	3,272	4,029
Average	409	514	365	318	757	509	175	157	155	166	354	379

## Flow into the Delta in CFS

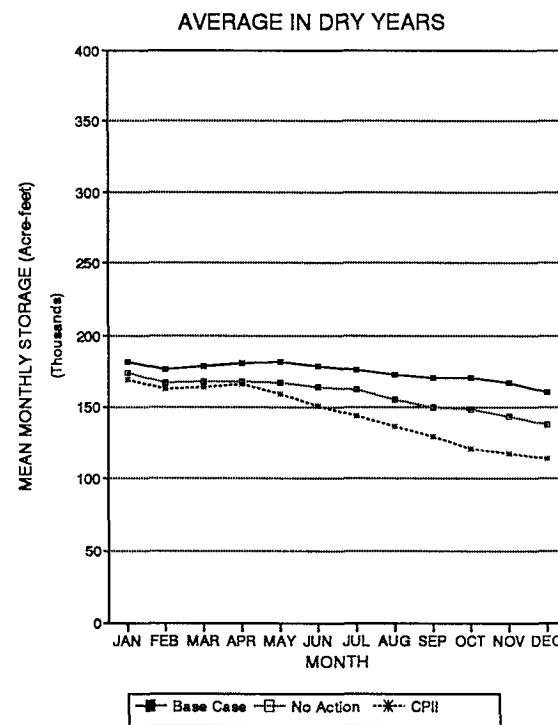
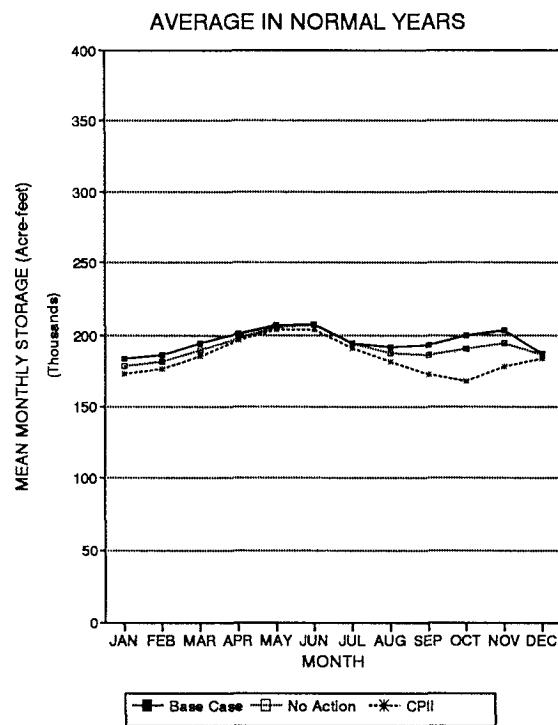
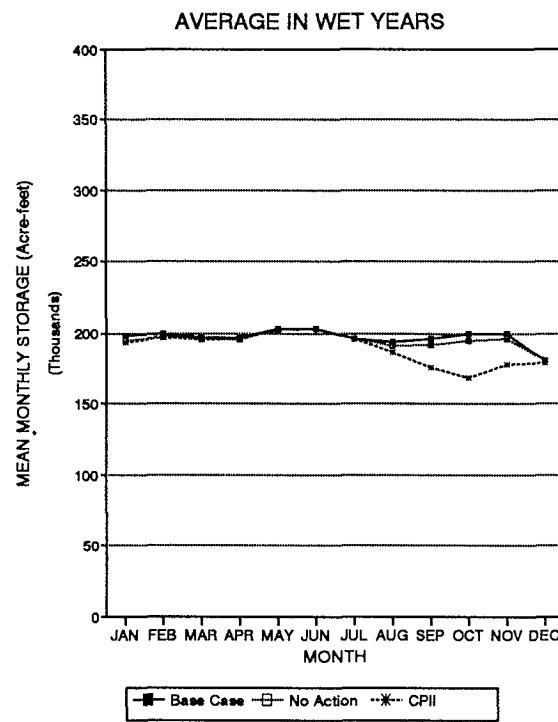
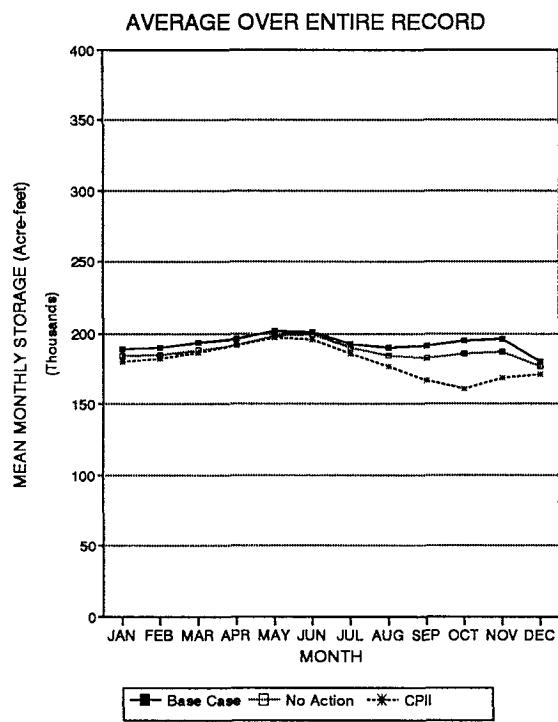
YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1921	575	663	571	110	820	1,331	166	147	152	244	291	219
1922	110	133	90	110	2,335	1,953	278	258	263	340	291	238
1923	395	350	90	110	399	540	93	74	78	189	291	219
1924	119	115	105	110	325	0	25	16	12	58	191	141
1925	125	133	106	110	325	466	19	0	4	99	291	219
1926	135	133	105	110	325	0	0	0	4	49	191	140
1927	125	133	105	110	622	926	262	243	248	225	310	219
1928	127	133	888	110	325	466	19	0	4	99	291	219
1929	135	133	90	110	325	0	0	0	4	58	191	141
1930	125	133	106	110	325	0	0	0	4	49	191	141
1931	125	133	105	110	0	0	0	4	8	9	91	65
1932	42	42	40	5	325	0	0	0	4	49	191	140
1933	128	135	116	110	325	0	0	0	4	49	191	141
1934	125	133	105	110	325	0	0	0	4	58	191	140
1935	125	133	106	110	325	3	0	0	4	49	191	140
1936	125	1,756	395	325	1,224	934	245	225	230	275	291	219
1937	127	115	568	110	476	618	170	151	156	192	291	1,097
1938	125	1,107	1,602	2,120	2,491	1,637	358	338	343	355	291	219
1939	135	115	90	110	325	0	0	0	4	58	191	141
1940	125	133	564	110	1,241	538	91	72	76	223	291	219
1941	395	804	542	110	843	1,078	312	293	297	240	291	324
1942	1,270	950	90	110	1,801	1,460	369	349	354	316	453	328
1943	1,432	923	1,731	445	1,245	650	202	183	188	238	291	219
1944	110	115	90	110	325	3	0	0	4	49	191	140
1945	125	133	105	110	461	603	155	136	141	213	421	988
1946	526	133	105	110	374	515	68	48	53	197	291	219
1947	110	133	105	110	325	3	0	0	4	49	191	140
1948	125	133	105	110	325	3	0	0	4	49	191	140
1949	125	133	105	110	325	3	0	0	4	49	191	140
1950	125	133	105	110	437	578	131	111	116	203	3,263	4,019
1951	1,227	1,020	304	110	325	466	19	0	4	149	291	528
1952	1,260	1,161	945	2,738	2,666	1,283	577	557	562	368	291	219
1953	114	992	90	110	325	466	19	0	4	154	291	219
1954	127	115	105	110	325	3	0	0	4	49	191	140
1955	125	133	105	110	325	3	0	0	4	49	191	1,282
1956	2,939	896	148	110	1,757	1,286	368	348	353	345	291	219
1957	110	115	90	110	325	466	19	0	4	99	291	219
1958	125	889	876	1,596	2,164	1,343	458	439	444	344	291	219
1959	135	115	90	110	325	0	0	0	4	49	191	141
1960	125	133	105	110	325	0	0	0	4	49	191	141
1961	125	133	105	110	0	0	0	0	4	9	91	65
1962	42	42	40	5	325	0	0	0	4	49	191	141
1963	127	1,243	116	110	1,114	841	305	286	291	283	550	219
1964	127	133	105	110	325	0	0	0	4	49	191	2,041
1965	2,183	782	105	123	877	959	511	492	497	279	477	219
1966	190	115	105	110	325	3	0	0	4	49	191	140
1967	109	161	779	892	2,758	1,111	664	644	649	396	291	219
1968	127	119	90	110	325	3	0	0	4	49	191	140
1969	507	1,529	670	2,054	2,982	1,221	517	498	503	393	291	219
1970	3,269	999	410	110	325	466	19	0	4	129	528	680
1971	606	545	428	110	395	537	89	70	75	180	291	238
1972	116	115	90	110	325	3	0	0	4	49	191	140
1973	475	1,183	509	110	436	577	130	110	115	220	1,245	786
1974	1,279	175	820	422	866	849	401	382	387	295	291	219
1975	110	115	90	110	786	927	480	460	465	299	291	219
1976	135	133	105	110	325	0	25	16	12	58	191	140
1977	125	133	106	110	0	0	0	4	8	9	91	65
1978	42	42	40	5	0	0	0	4	8	9	91	65
1979	42	42	40	5	0	0	0	0	4	9	91	65
1980	42	1,429	435	110	951	939	491	472	477	279	291	219
1981	127	115	90	110	325	0	0	0	4	49	191	140
1982	1,106	2,818	1,589	3,176	2,292	1,076	629	609	614	461	1,204	1,485
1983	1,258	2,136	3,236	1,432	3,767	3,002	1,117	1,083	1,087	616	2,152	2,571
1984	1,379	972	286	110	469	611	163	144	148	220	474	219
1985	110	115	90	110	325	3	0	0	4	49	191	140
1986	125	4,680	2,231	110	1,253	734	287	267	272	286	291	219
1987	135	115	90	110	325	0	0	0	4	58	191	141
1988	125	133	106	110	0	0	0	4	8	9	91	65
1989	42	42	40	5	325	0	0	0	4	49	191	140
1990	127	135	116	110	325	0	0	0	4	58	191	140

Minimum	42	42	40	5	0	0	0	0	4	9	91	65
Maximum	3,269	4,680	3,236	3,176	3,767	3,002	1,117	1,083	1,087	616	3,263	4,019
Average	401	506	356	304	734	478	146	136	140	156	346	370

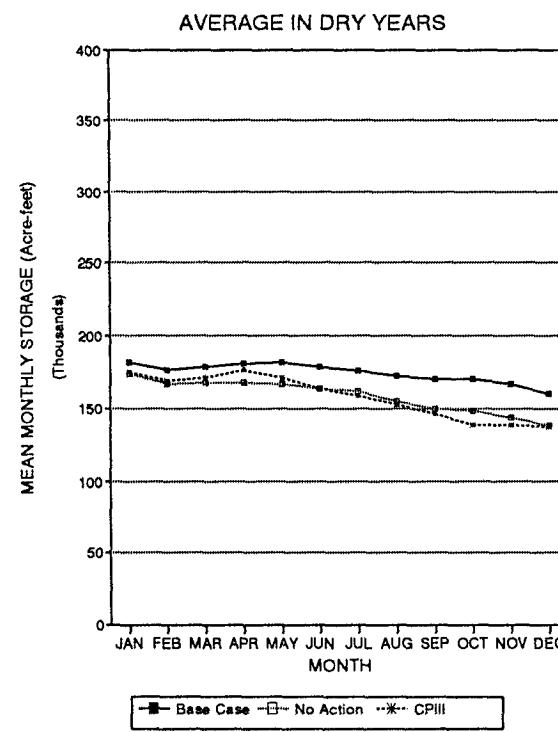
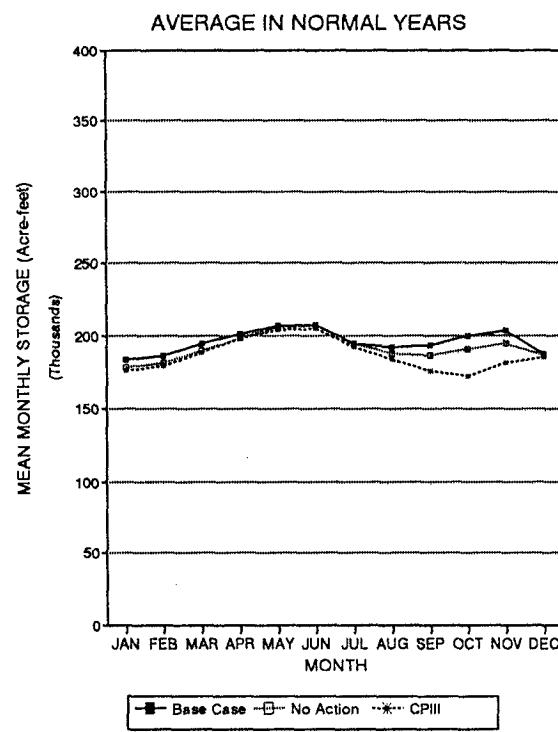
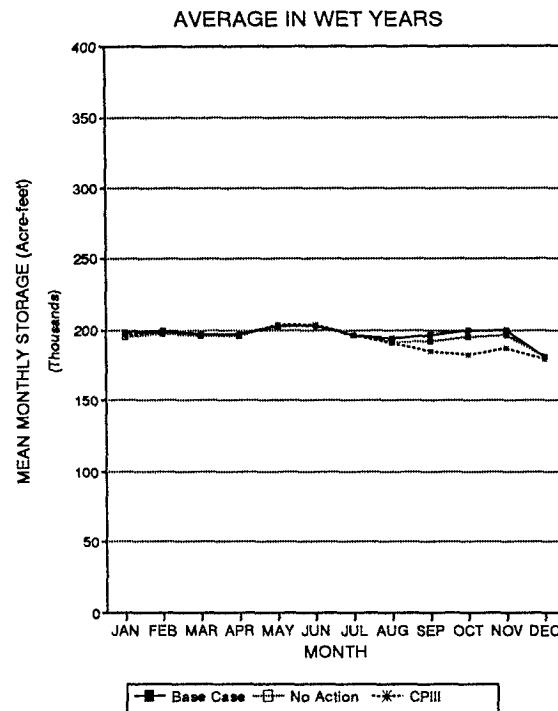
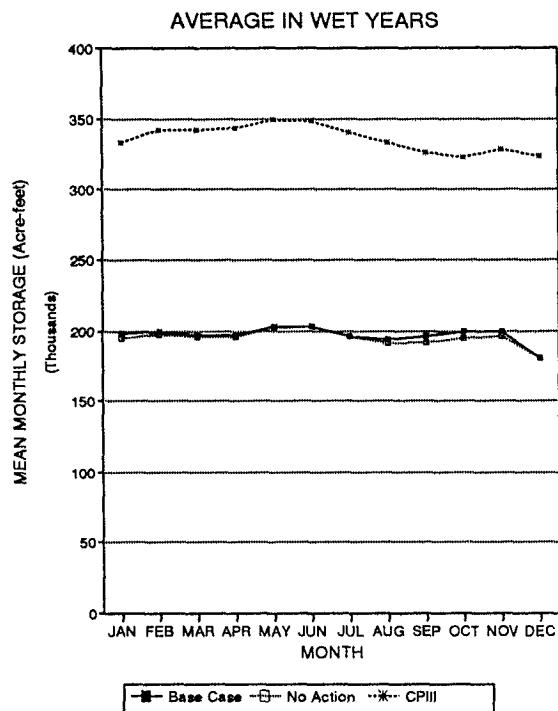
# PARDEE RESERVOIR STORAGE SIMULATION FROM 1921-1990 HYDROLOGY DATABASE



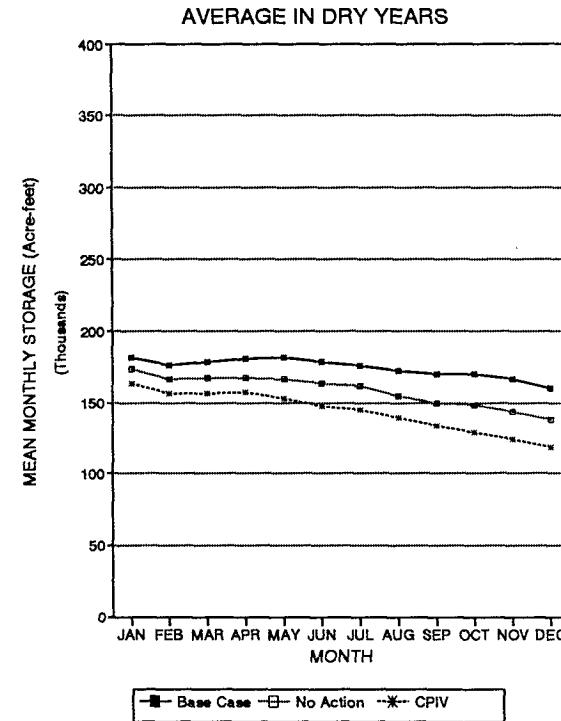
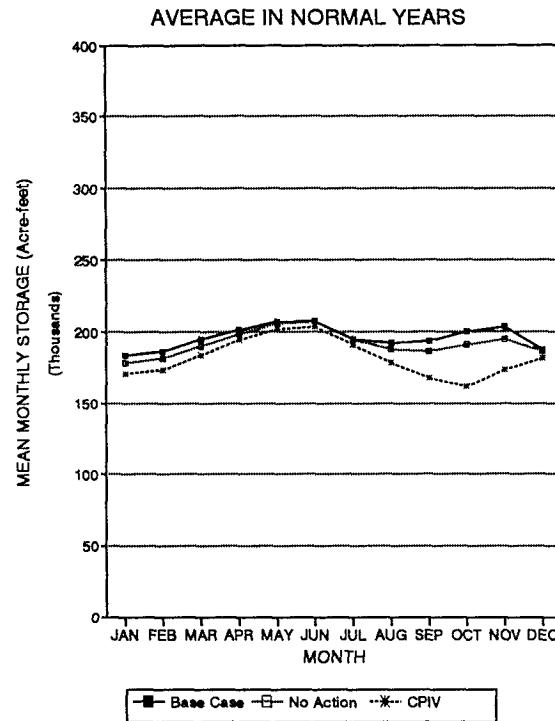
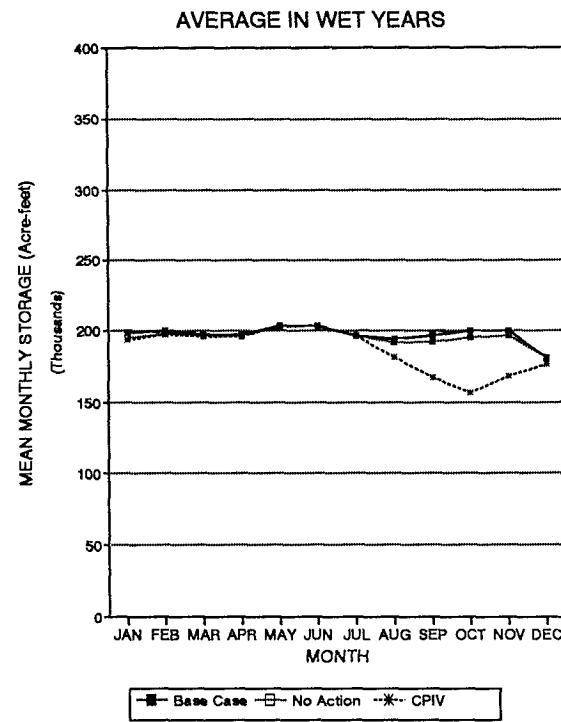
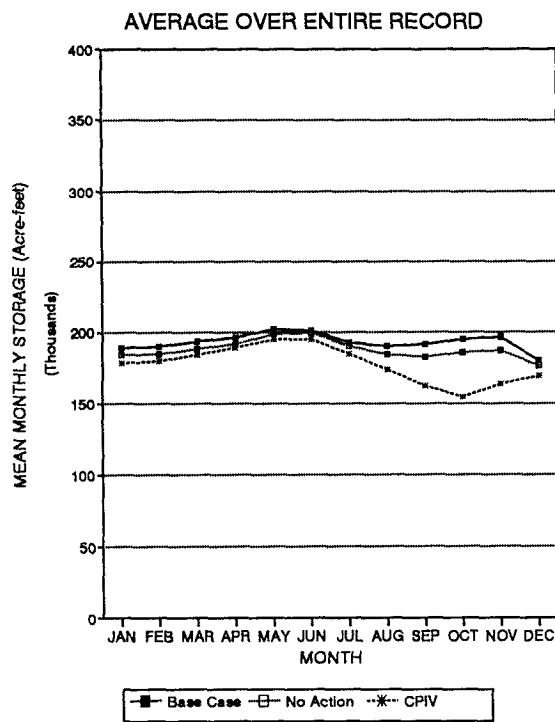
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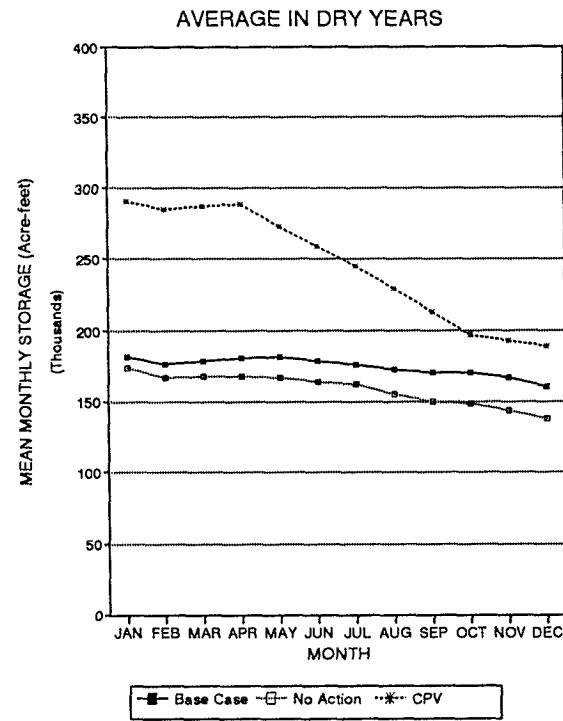
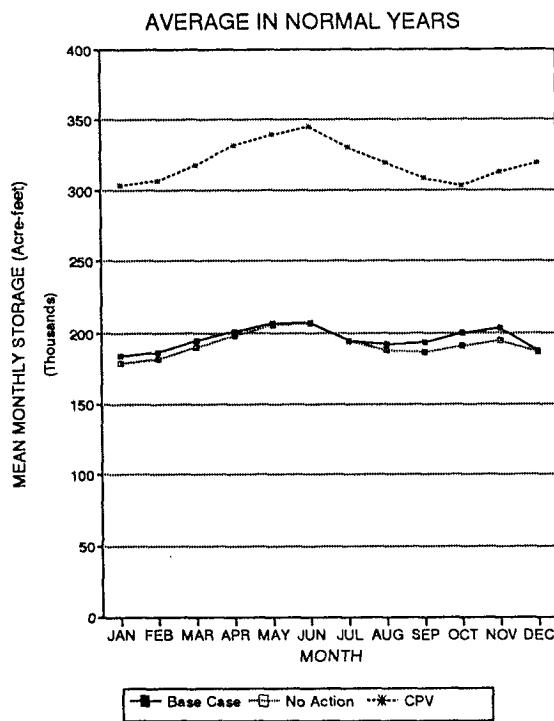
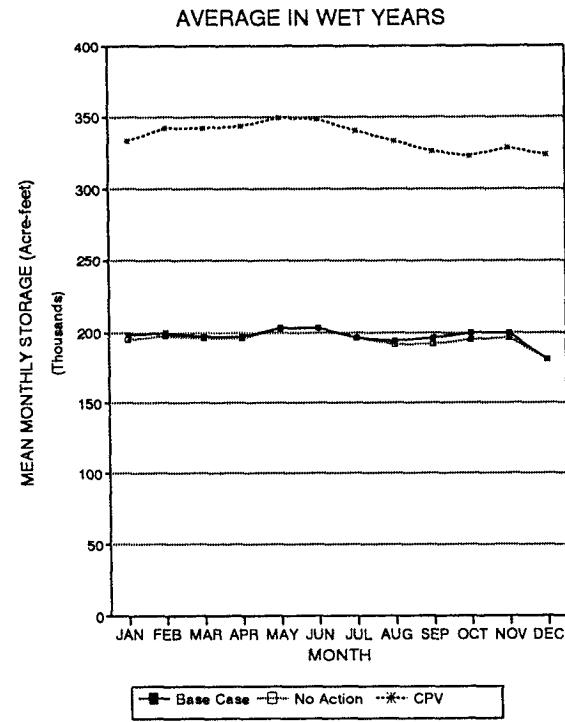
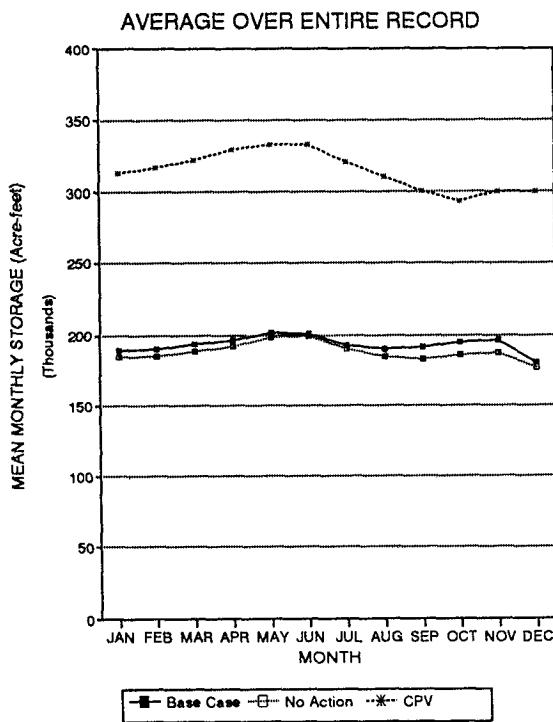
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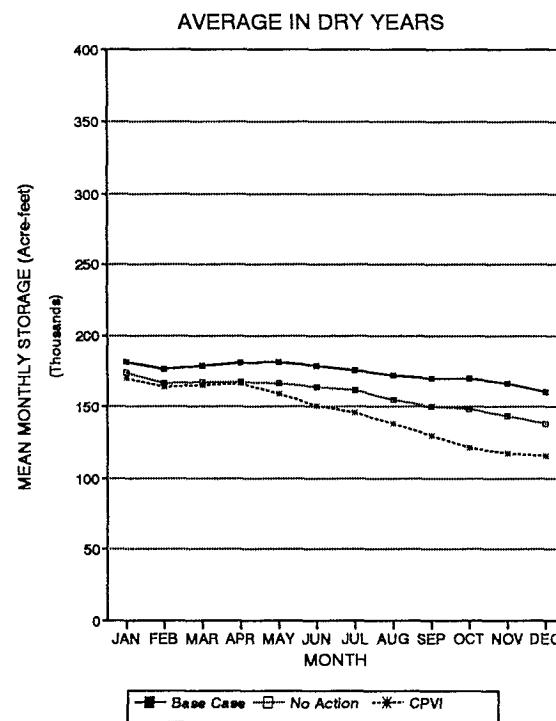
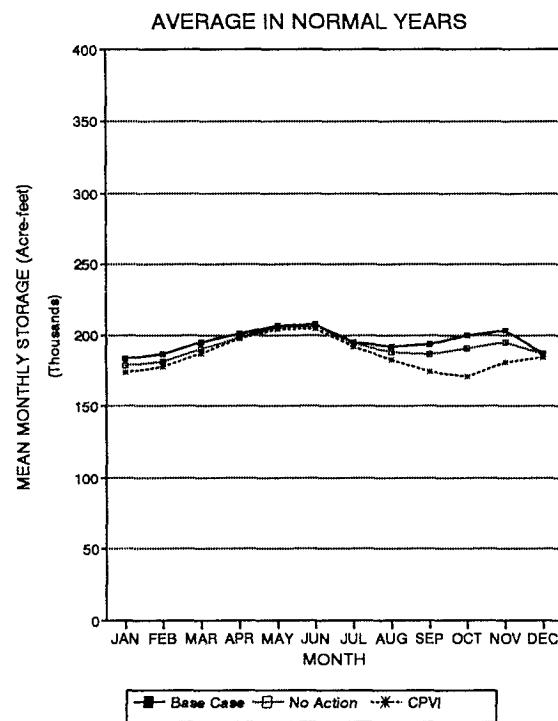
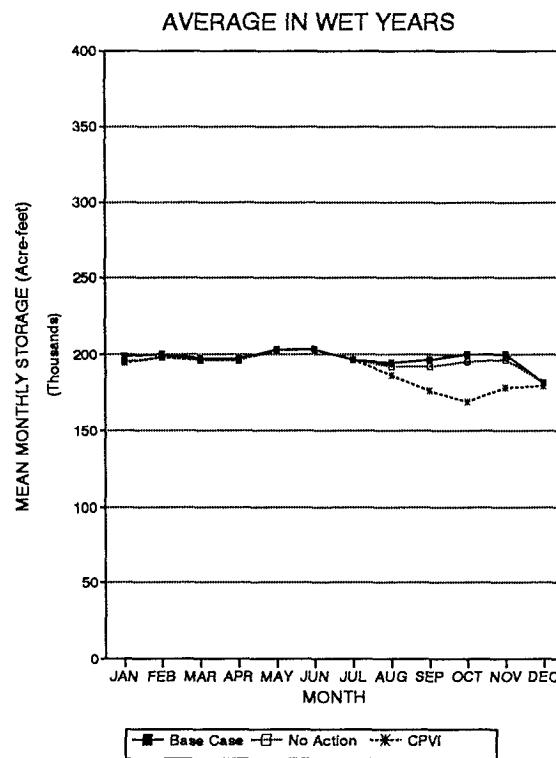
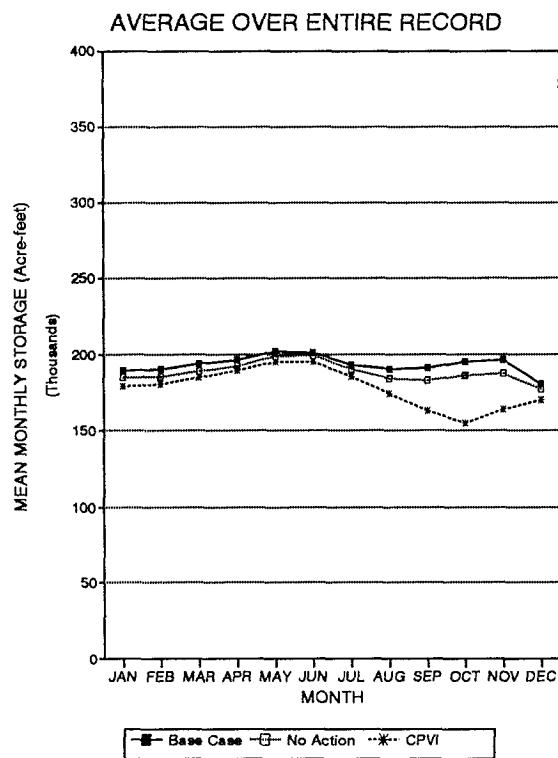
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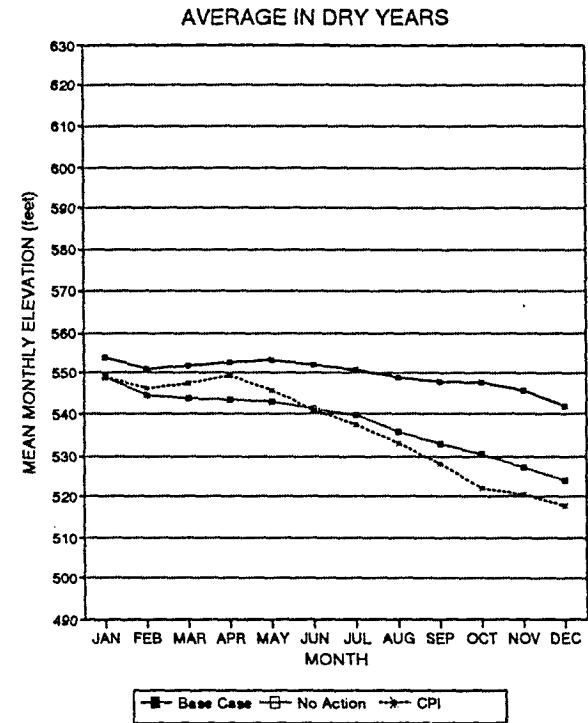
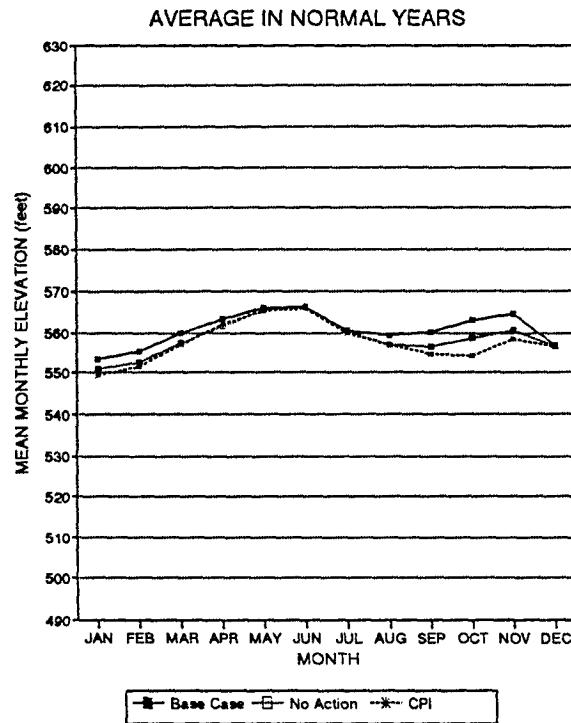
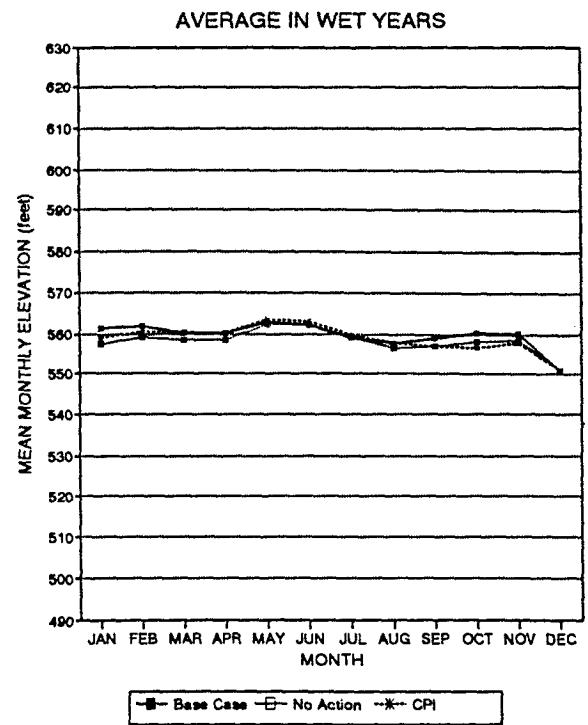
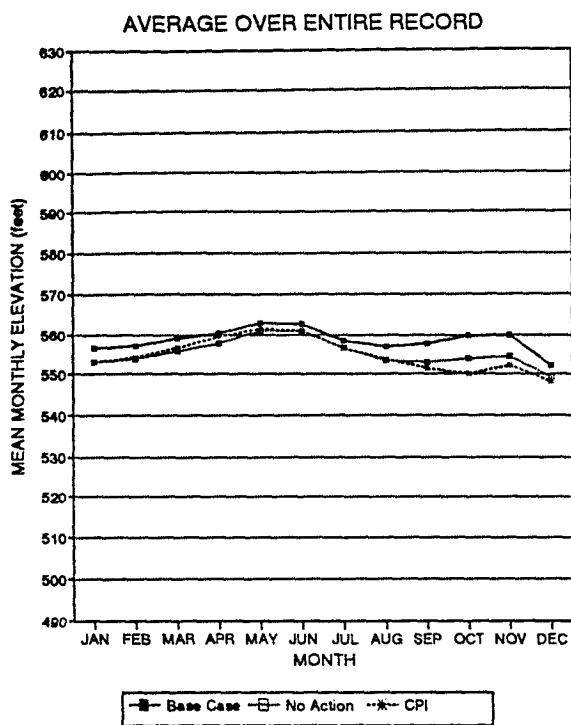
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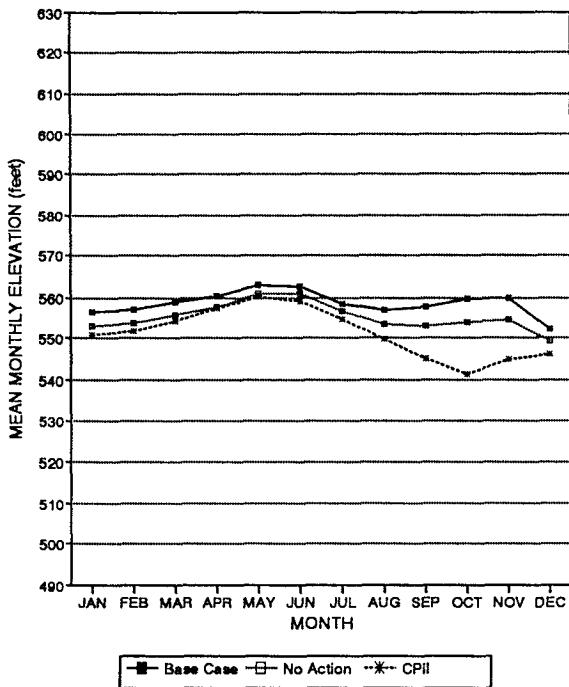


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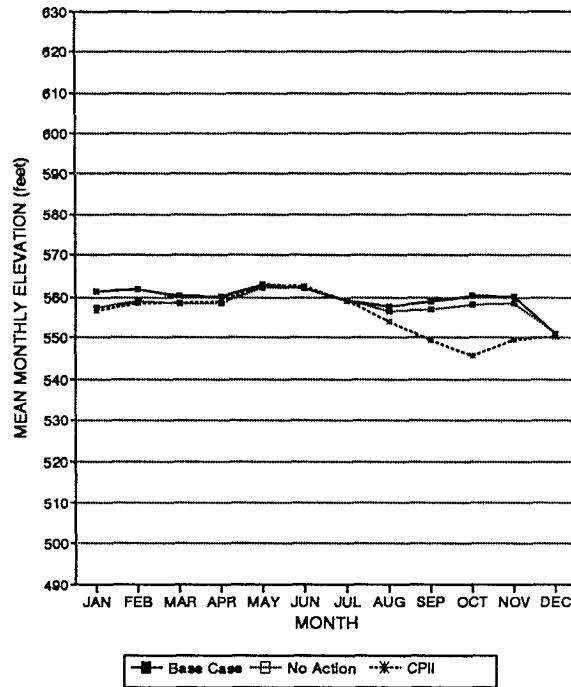


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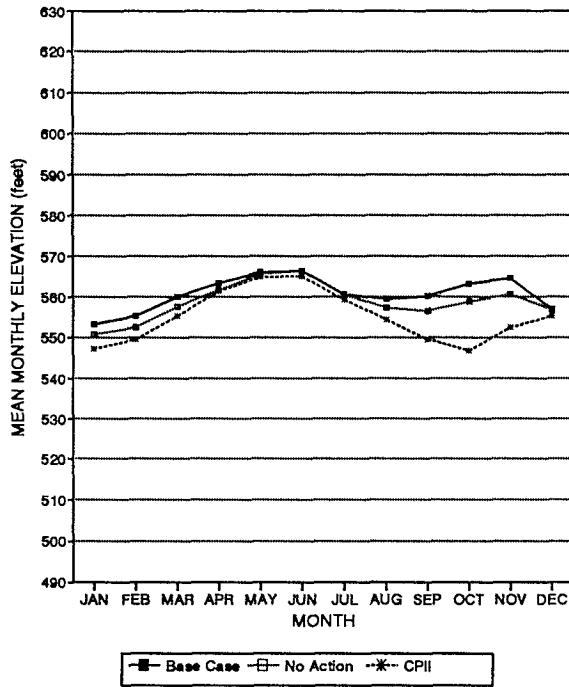
AVERAGE OVER ENTIRE RECORD



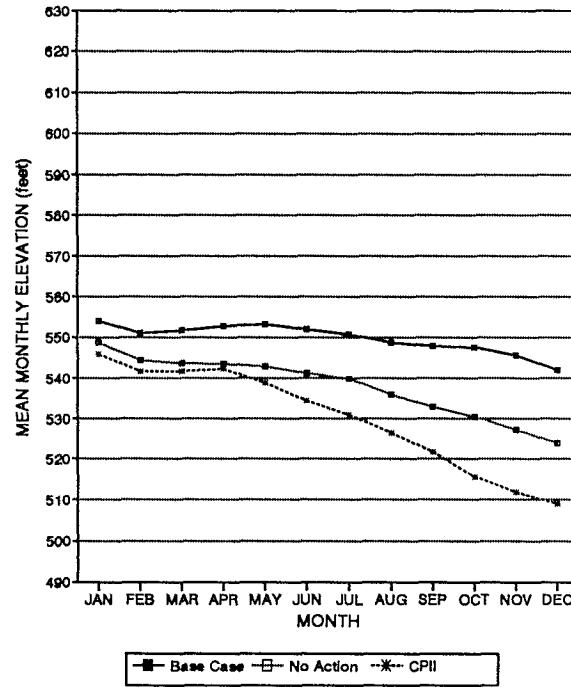
AVERAGE IN WET YEARS



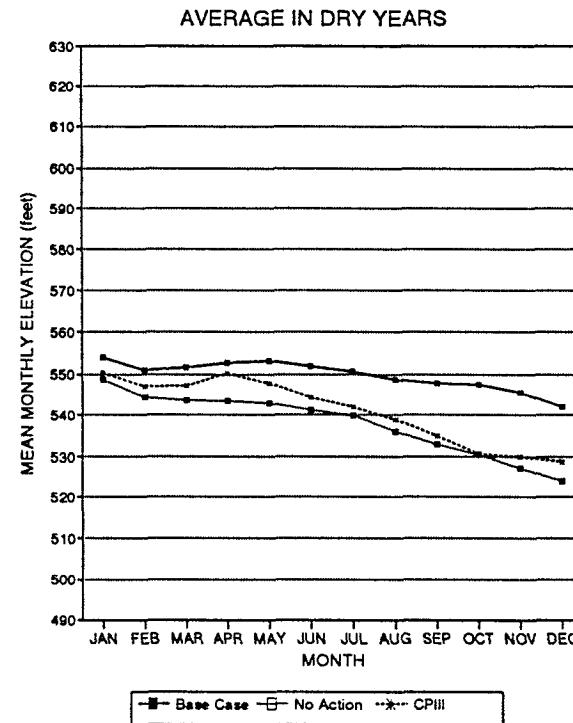
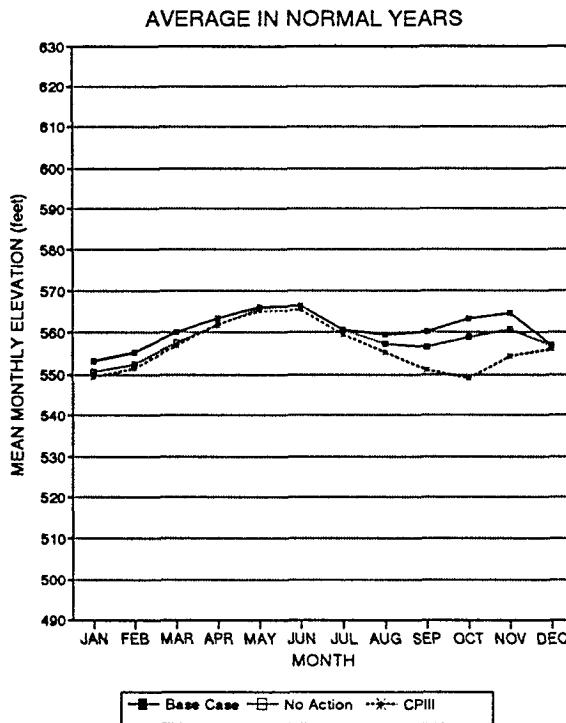
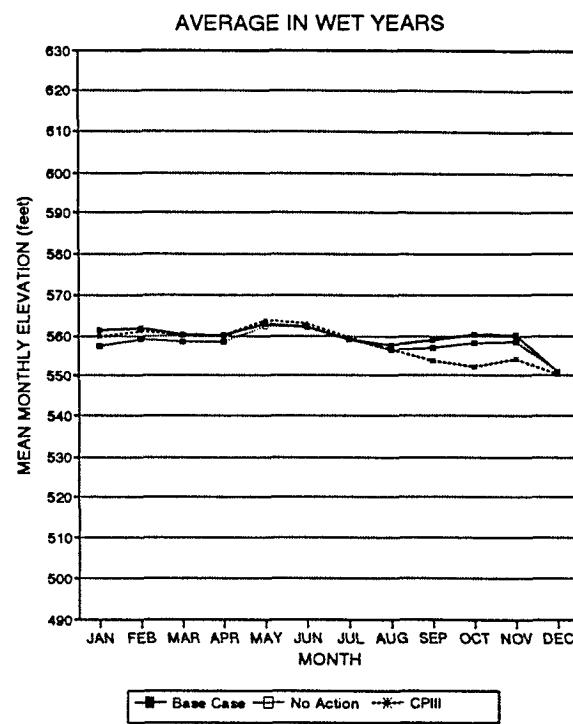
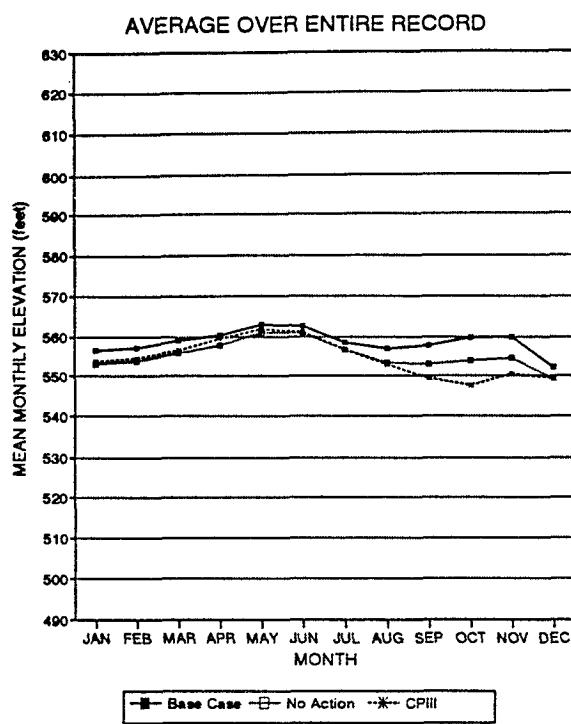
AVERAGE IN NORMAL YEARS



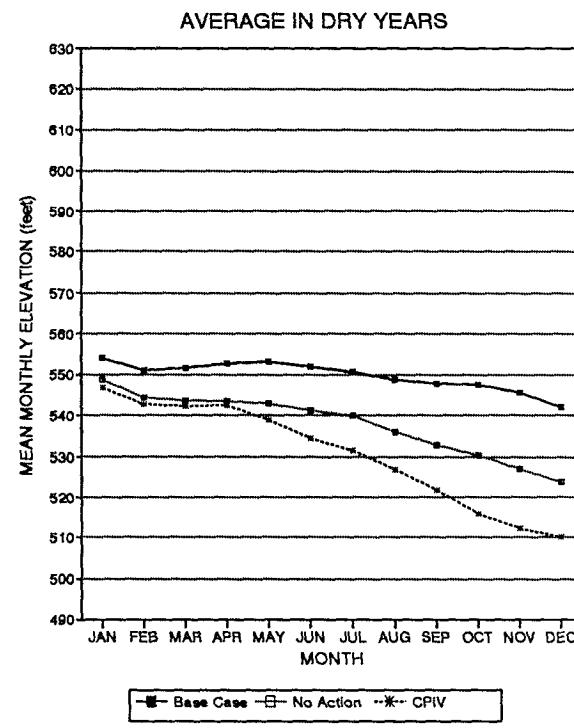
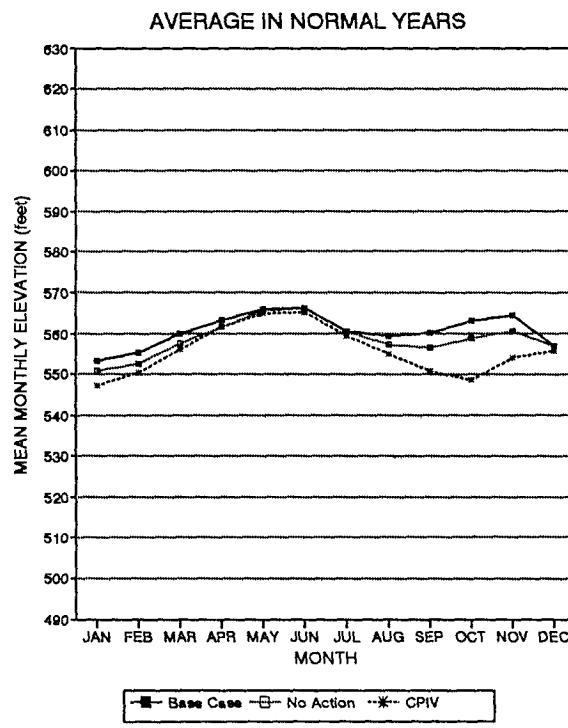
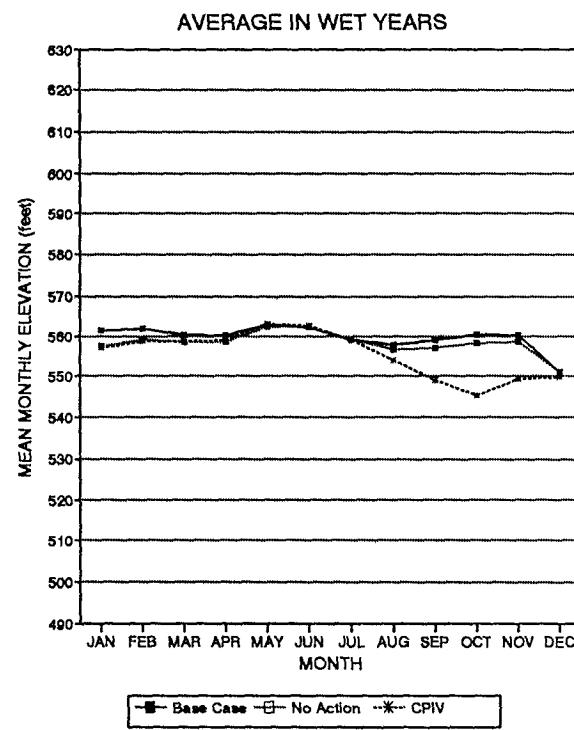
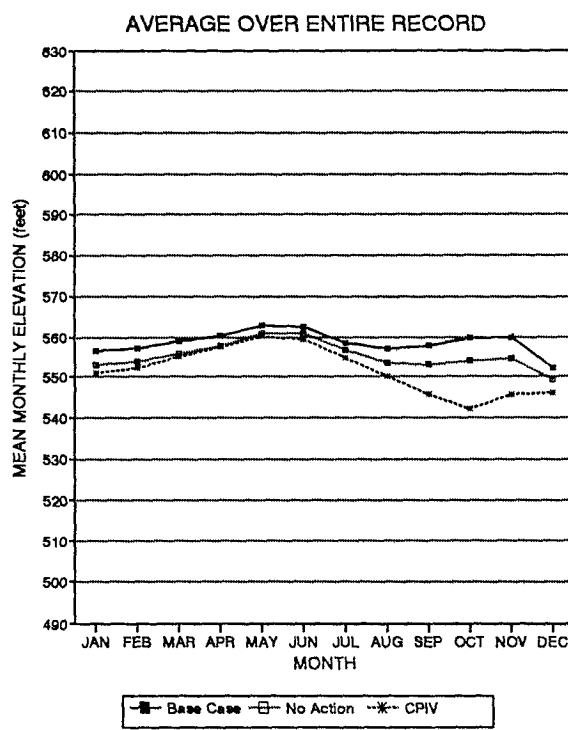
AVERAGE IN DRY YEARS



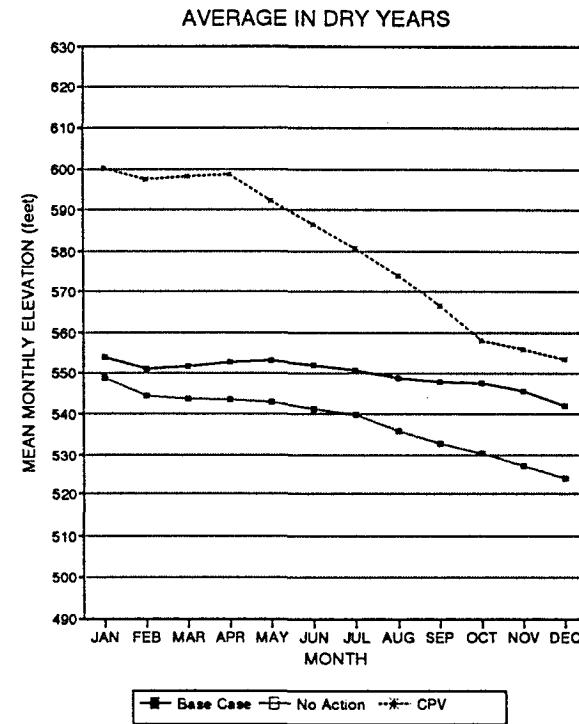
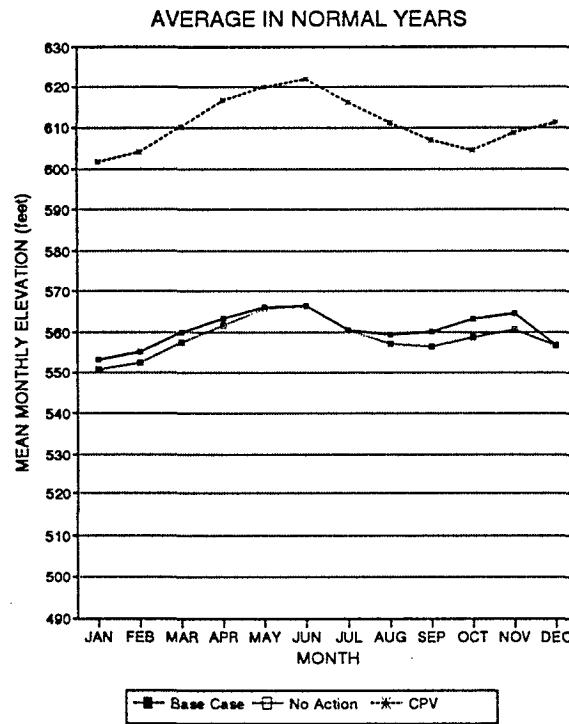
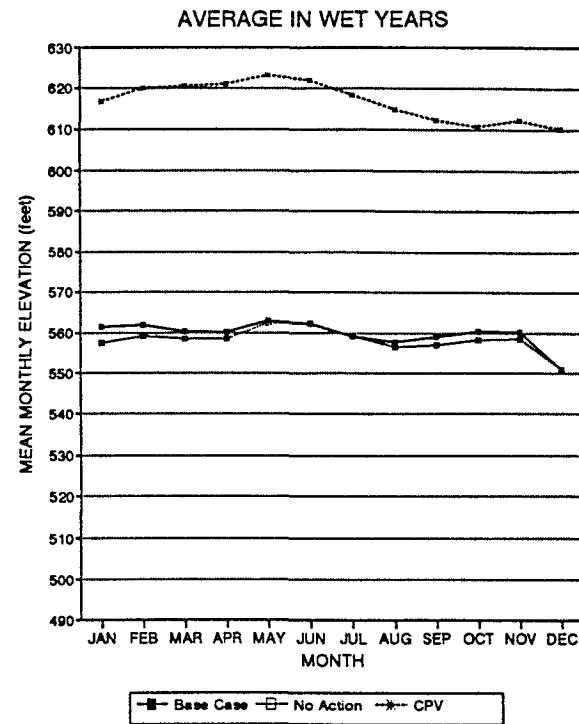
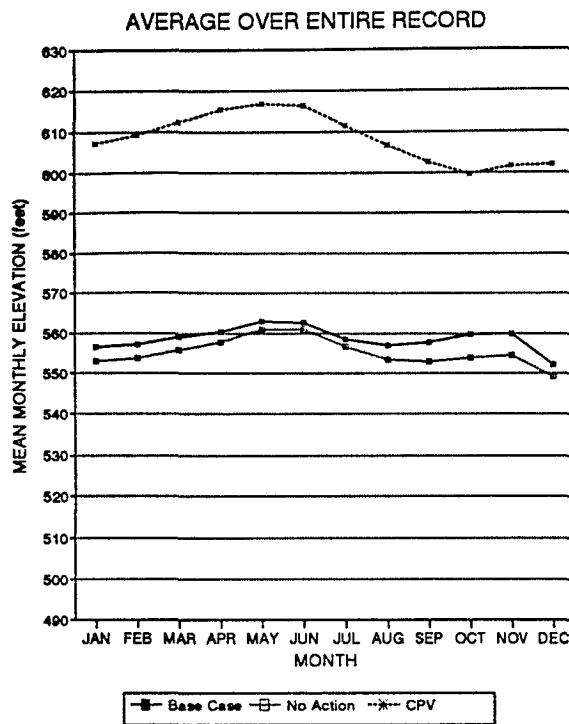
# PARDEE RESERVOIR ELEVATION SIMULATION FROM 1921-1990 HYDROLOGY DATABASE



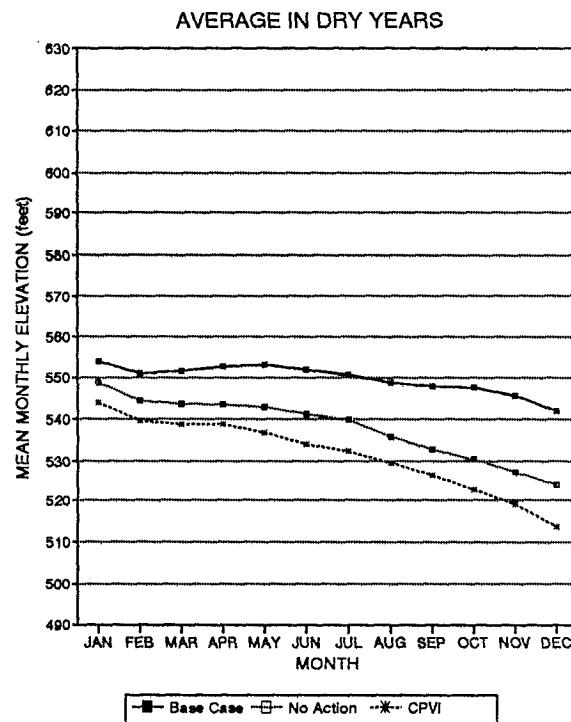
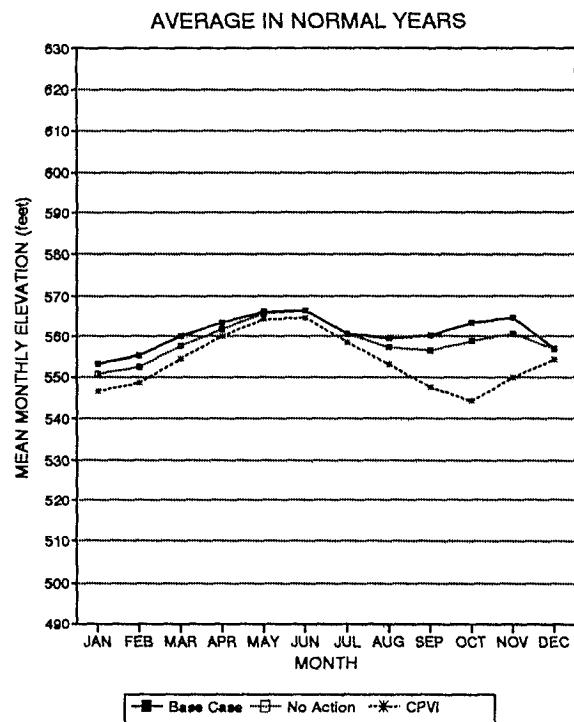
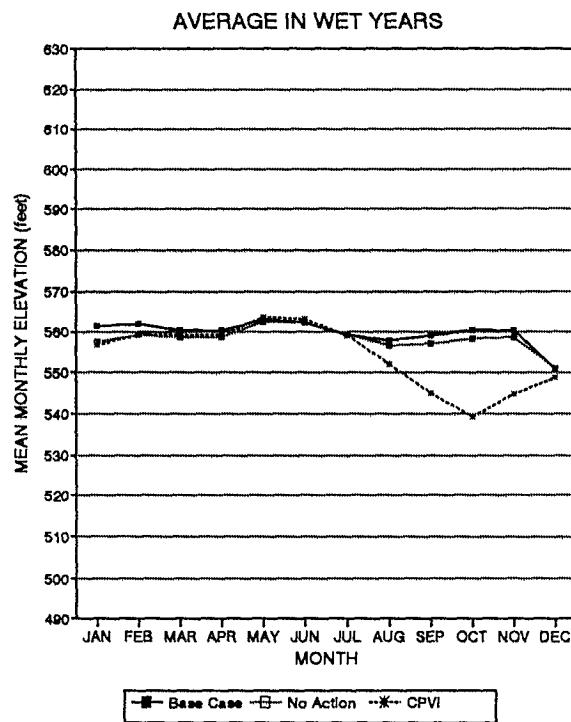
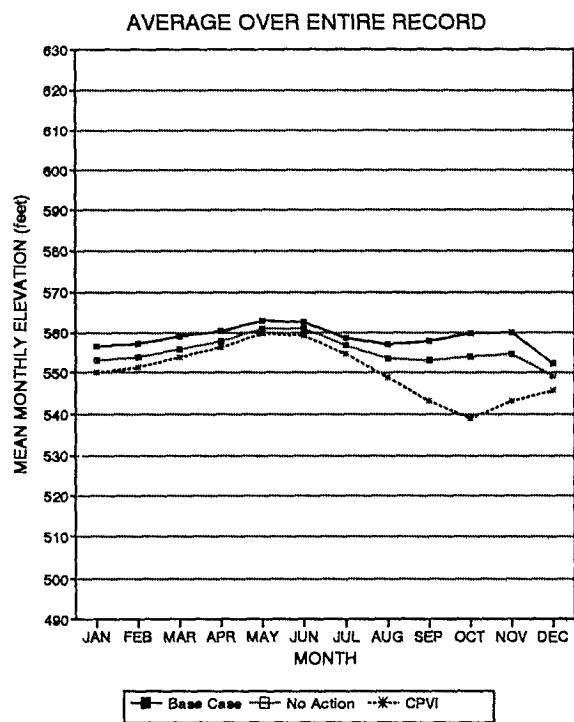
# PARDEE RESERVOIR ELEVATION SIMULATION FROM 1921-1990 HYDROLOGY DATABASE



# PARDEE RESERVOIR ELEVATION SIMULATION FROM 1921-1990 HYDROLOGY DATABASE

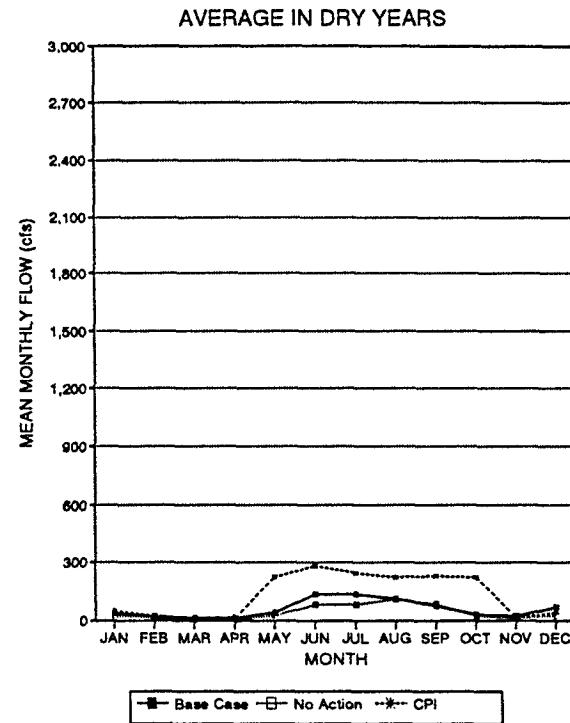
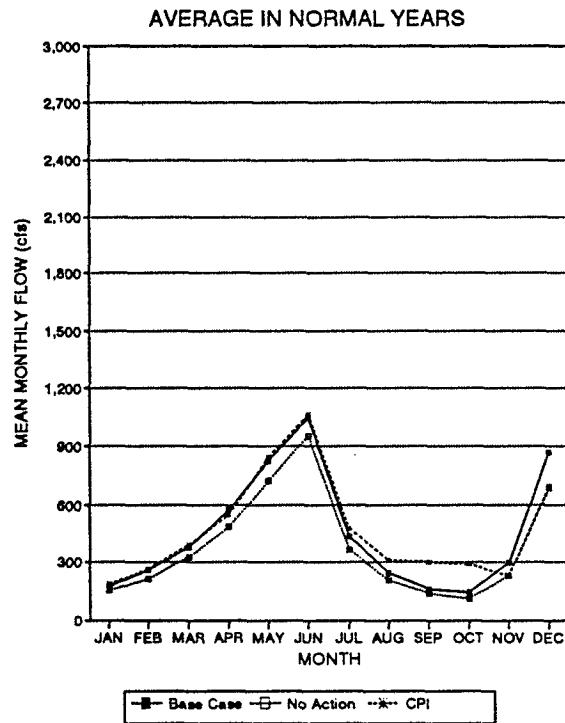
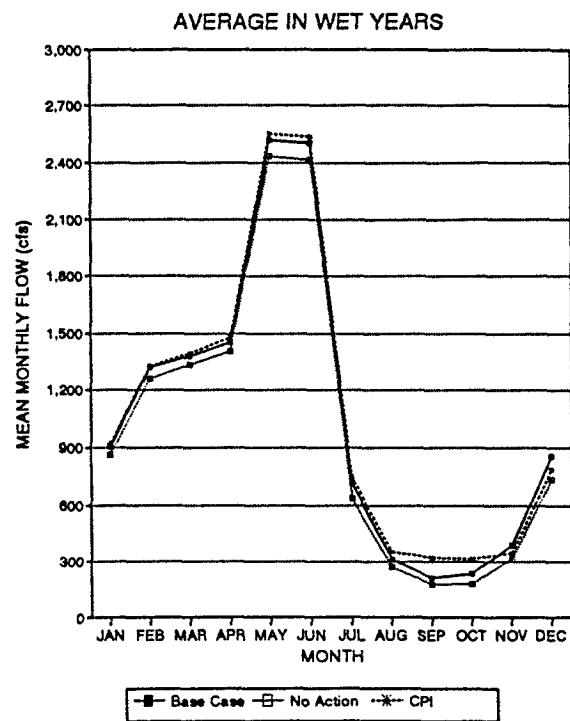
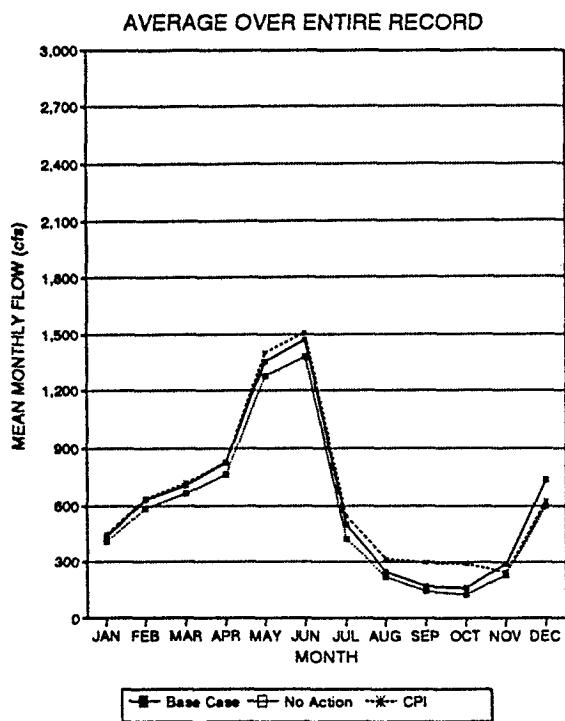


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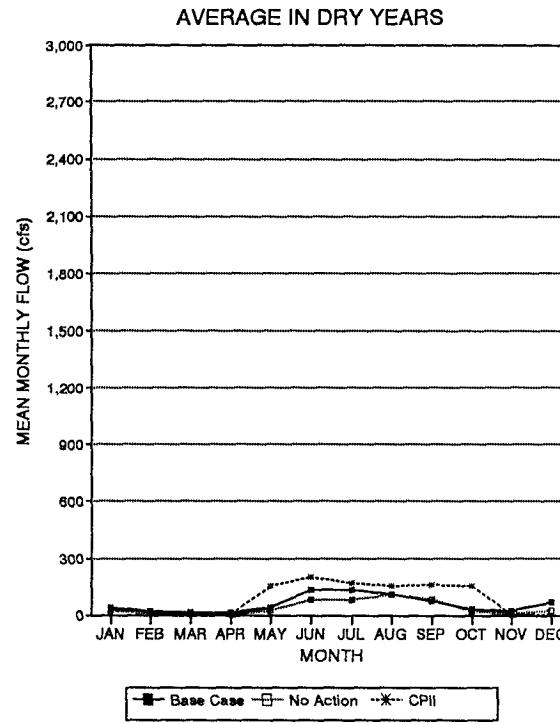
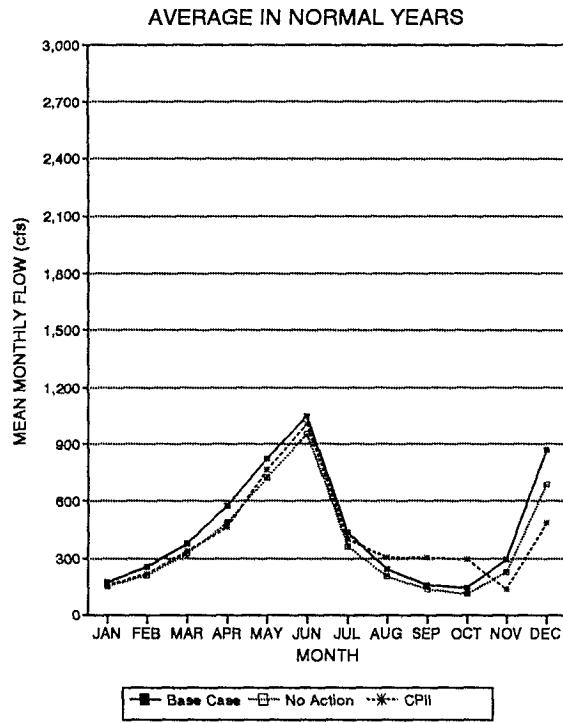
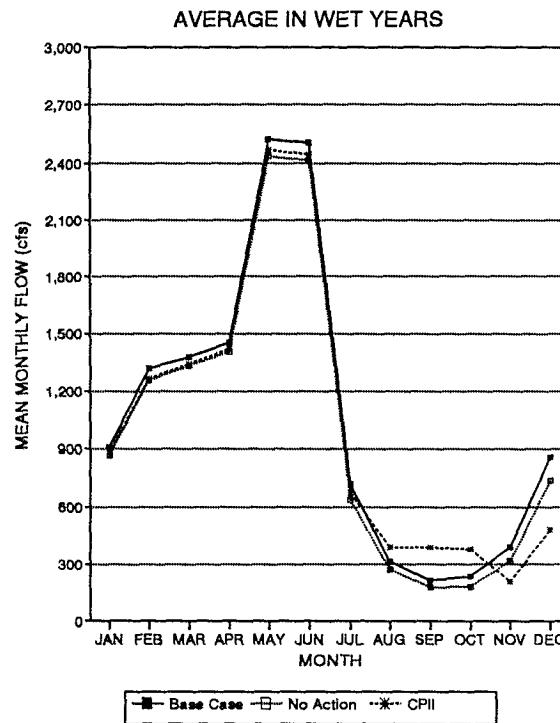
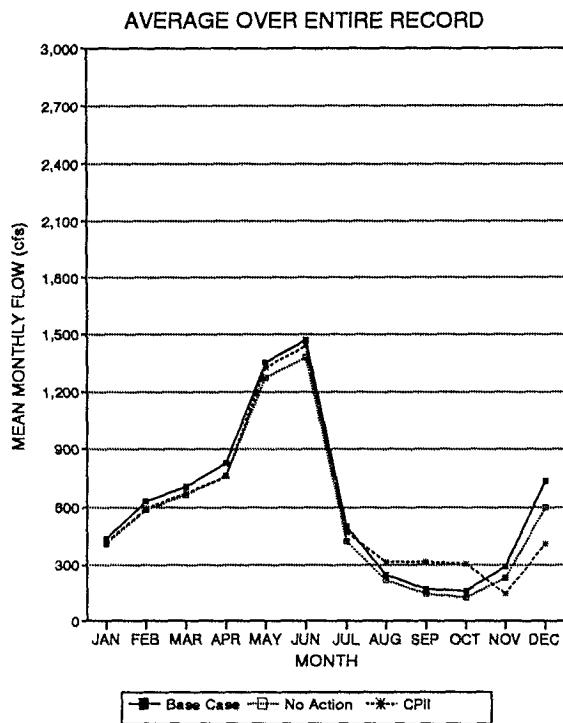
# PARDEE RELEASES

## SIMULATION FROM 1921-1990 HYDROLOGY DATABASE

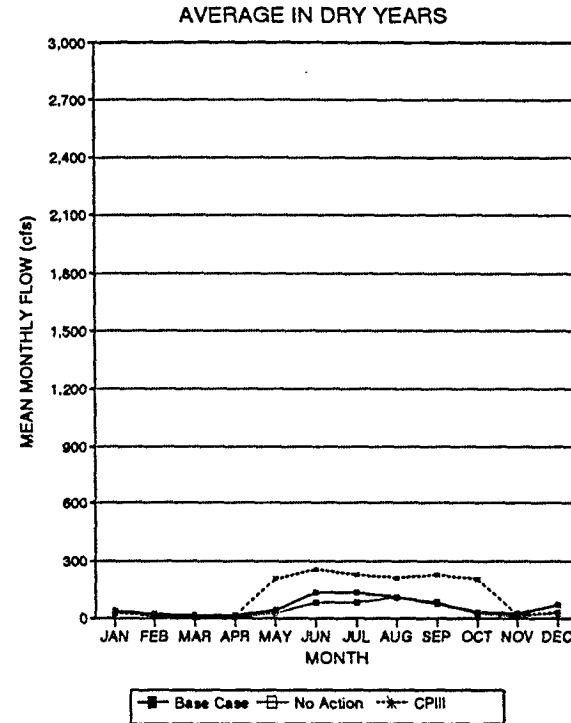
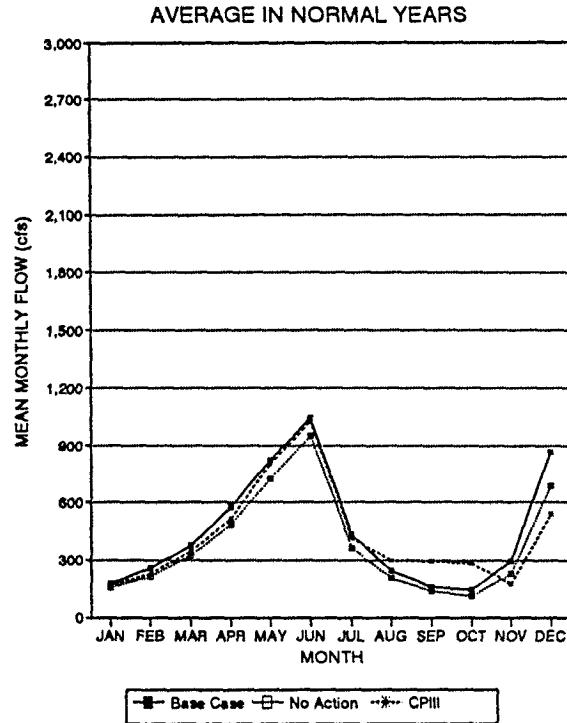
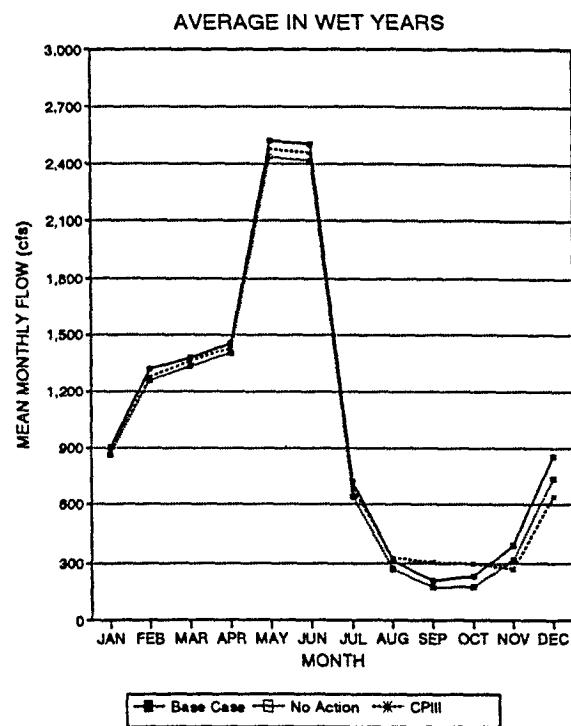
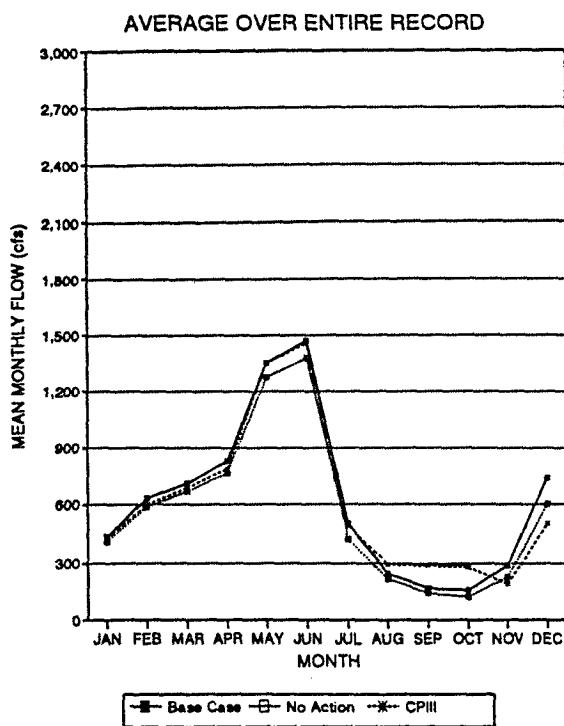


# PARDEE RELEASES

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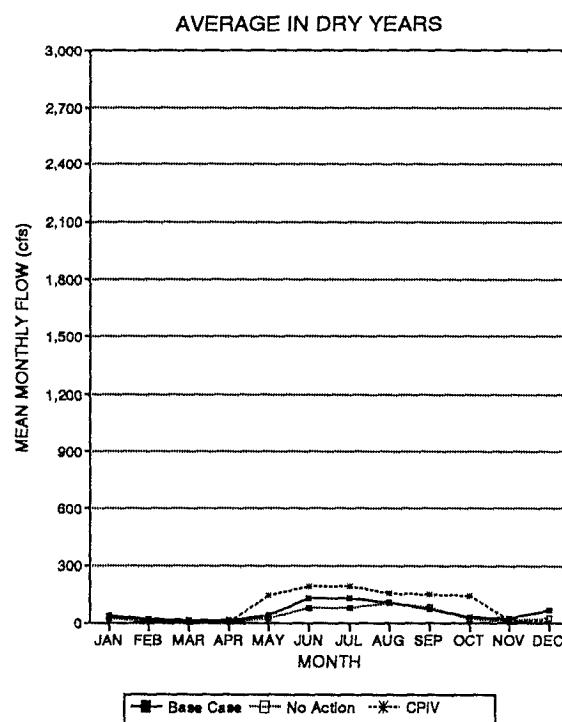
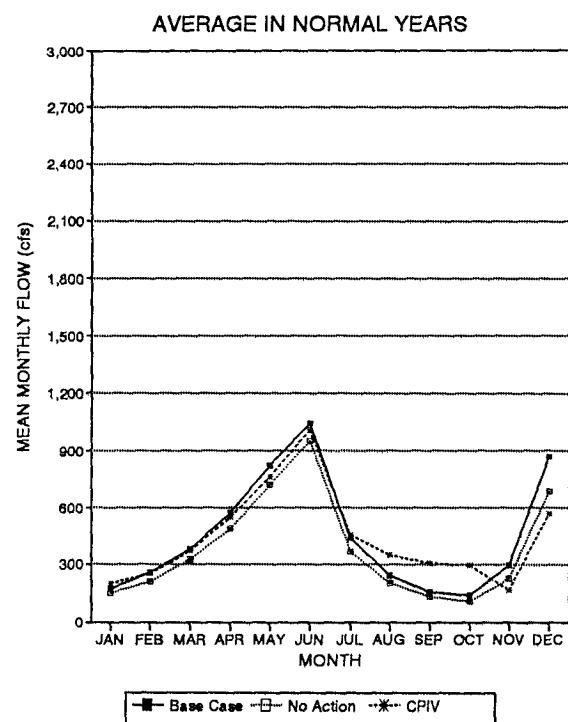
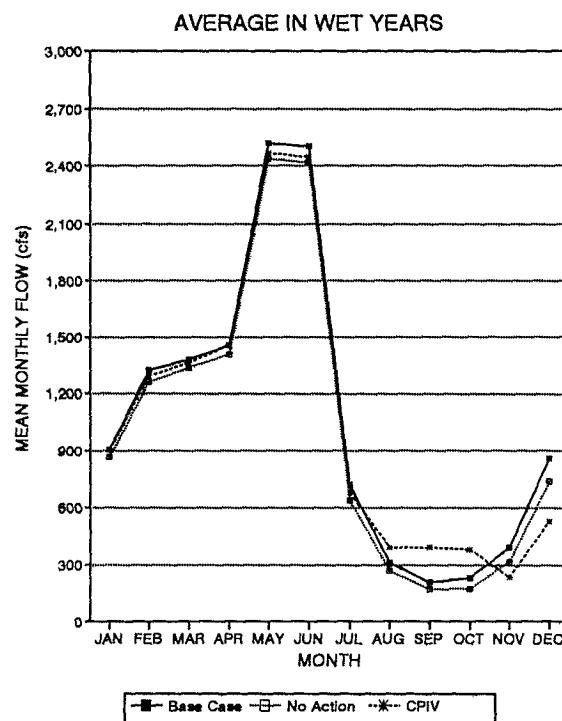
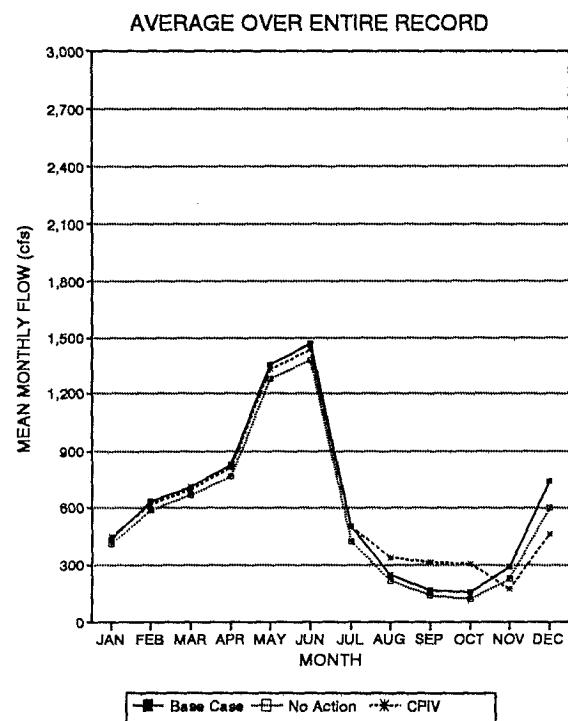


**PARDEE RELEASES**  
**SIMULATION FROM 1921-1990 HYDROLOGY DATABASE**

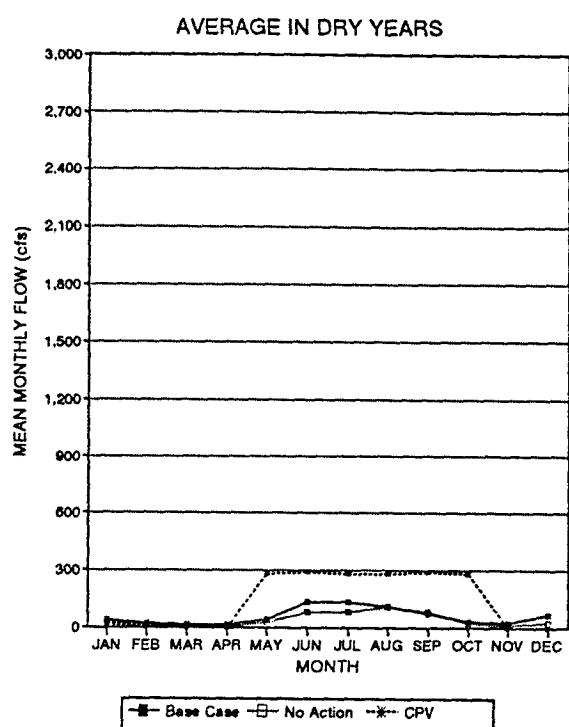
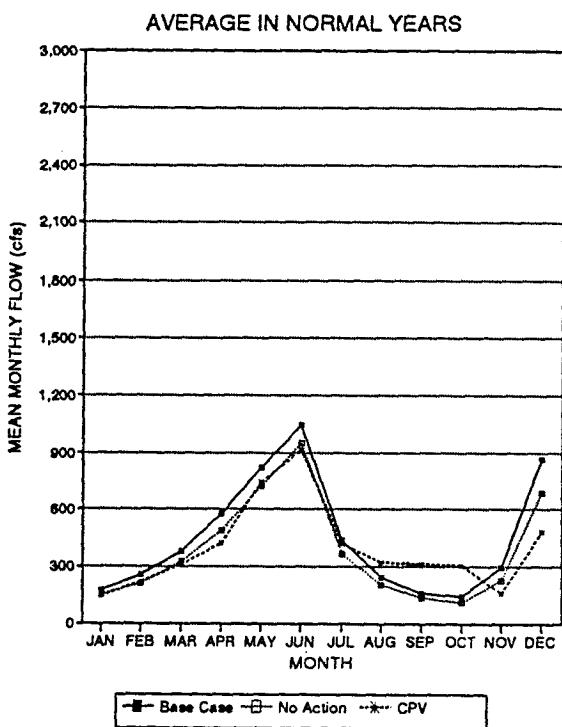
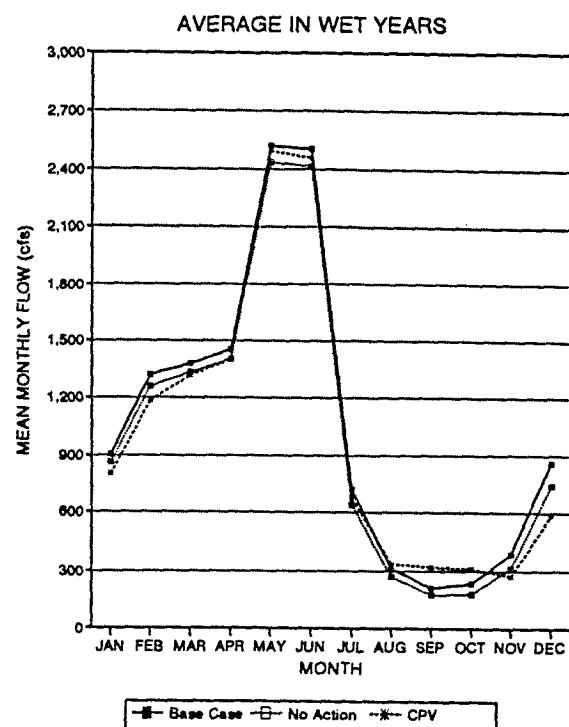
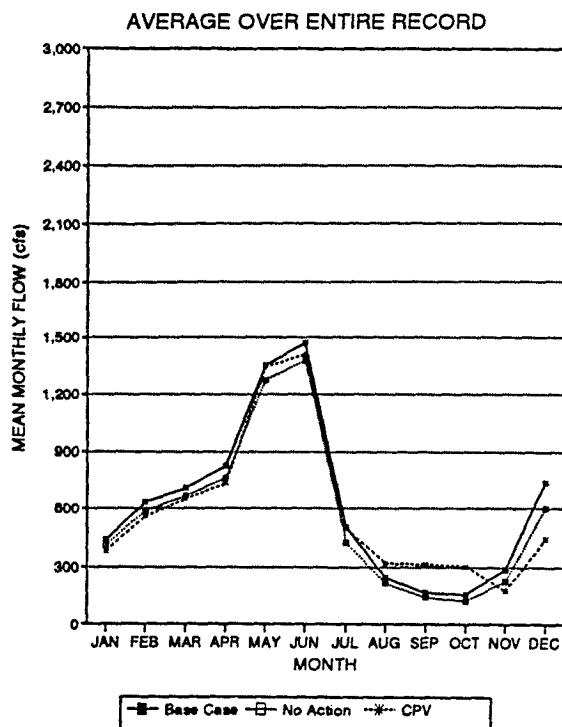


# PARDEE RELEASES

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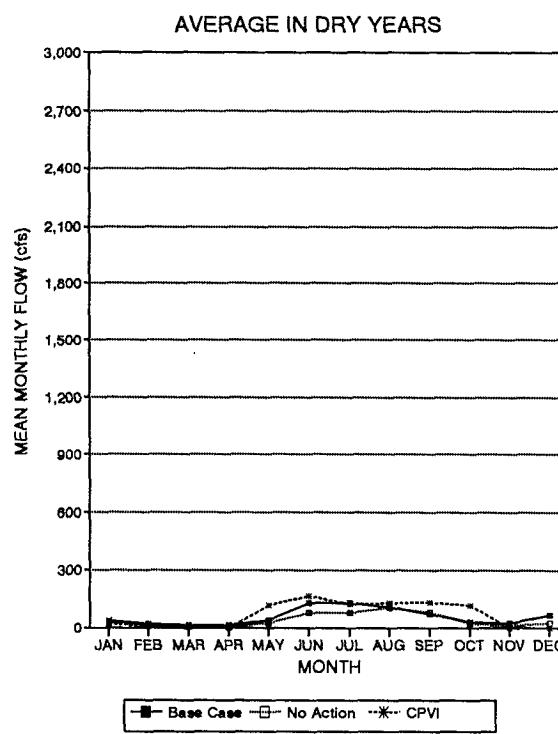
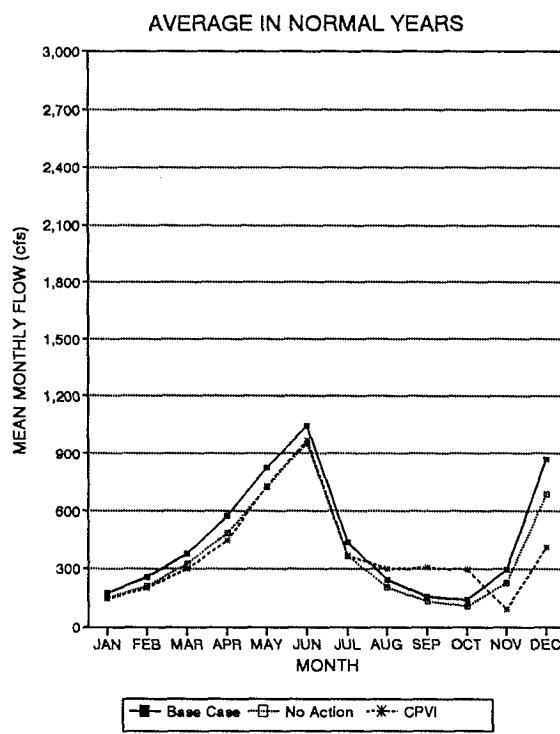
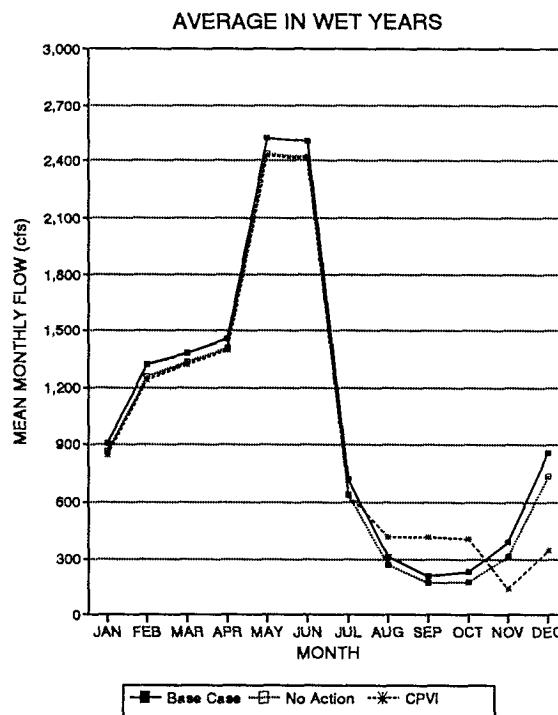
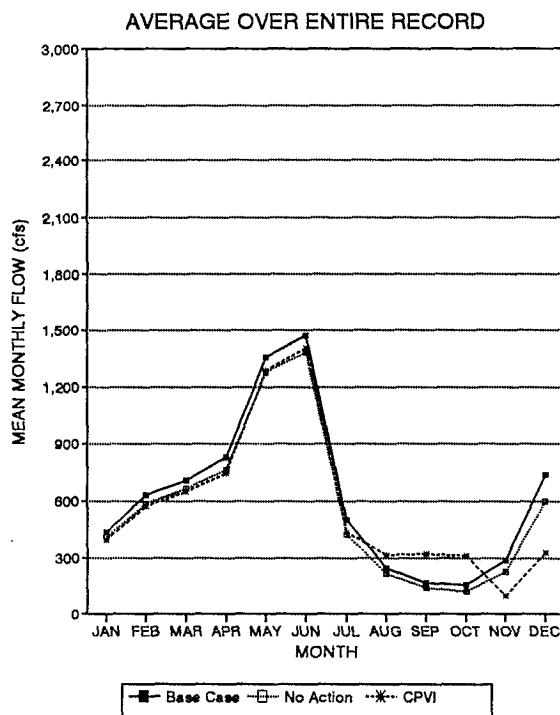


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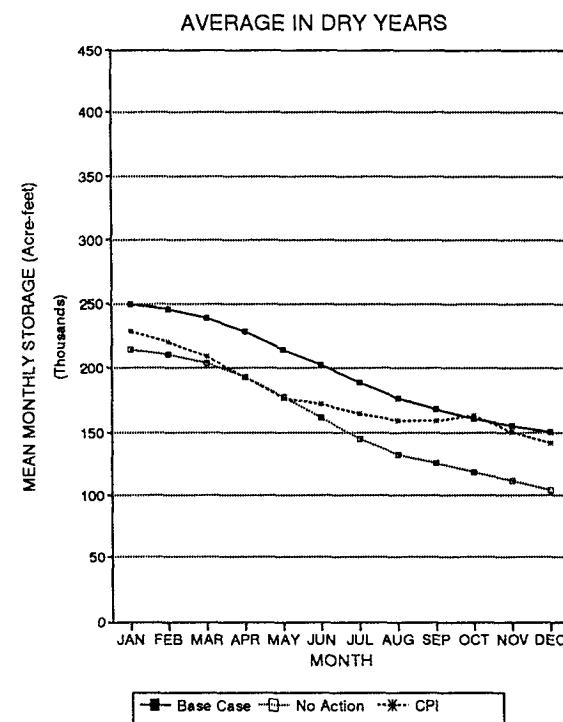
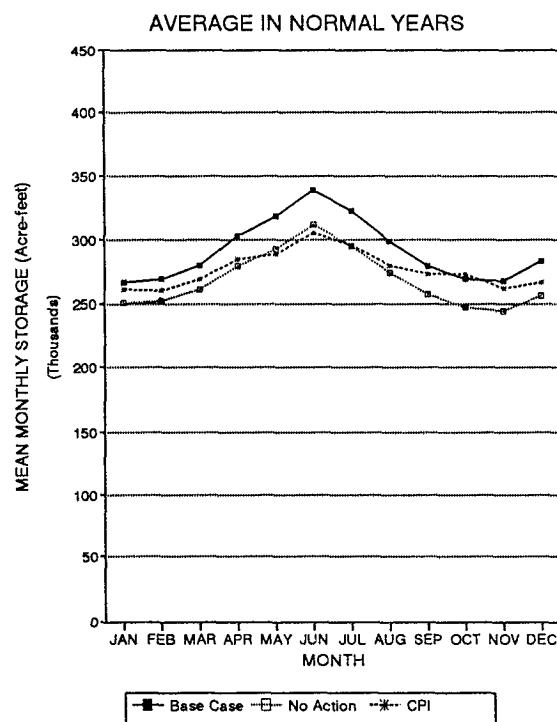
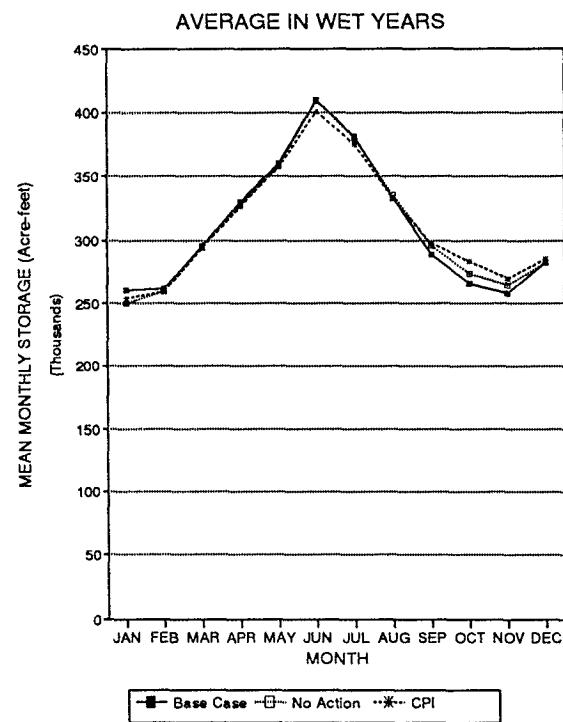
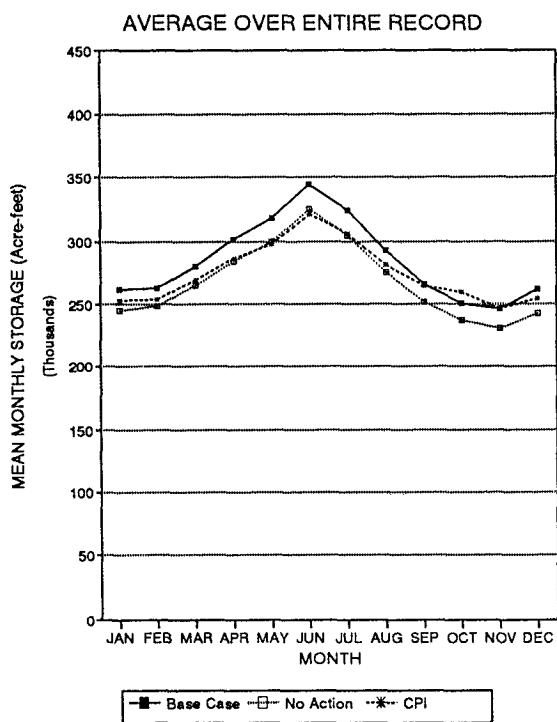


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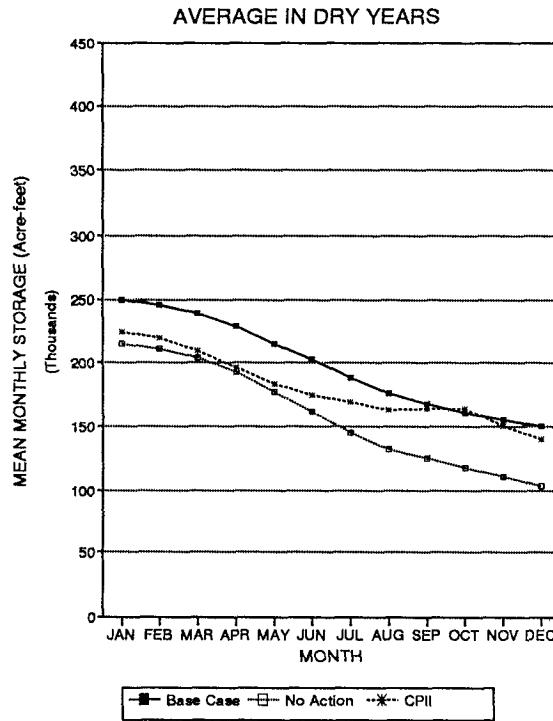
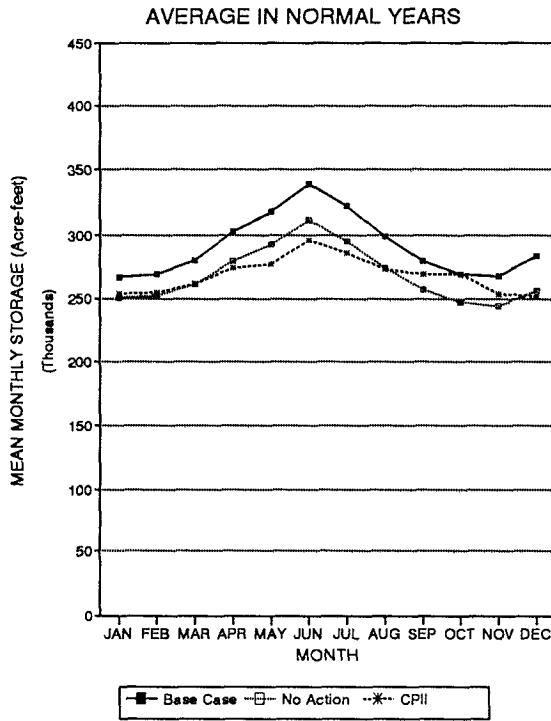
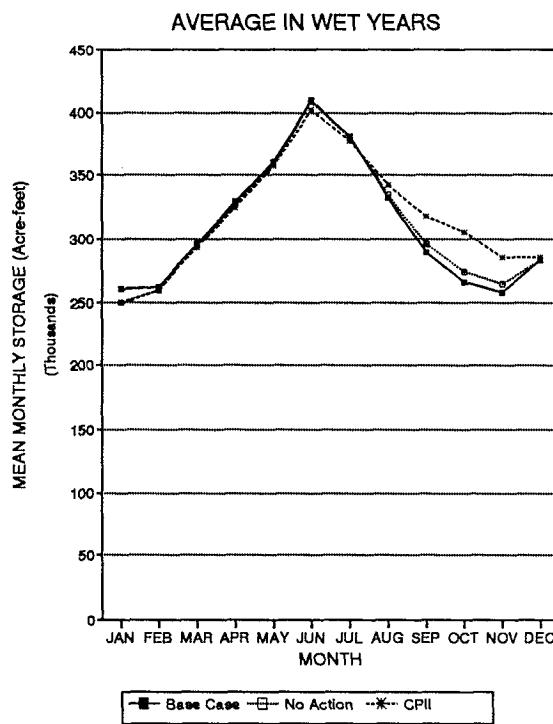
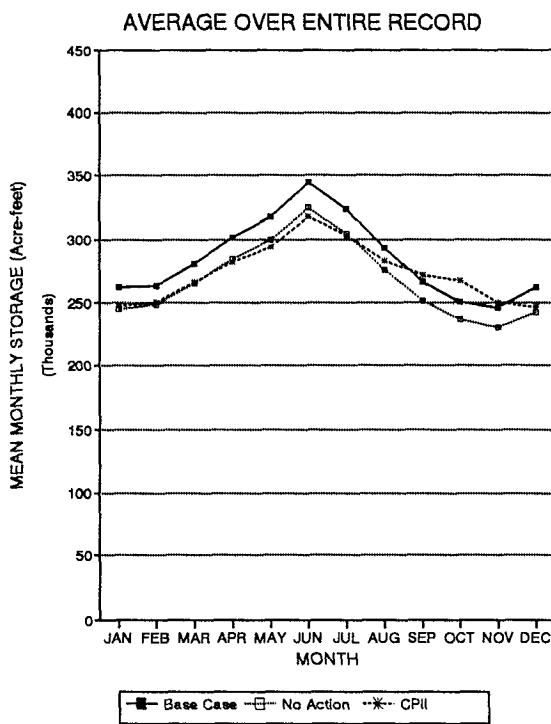
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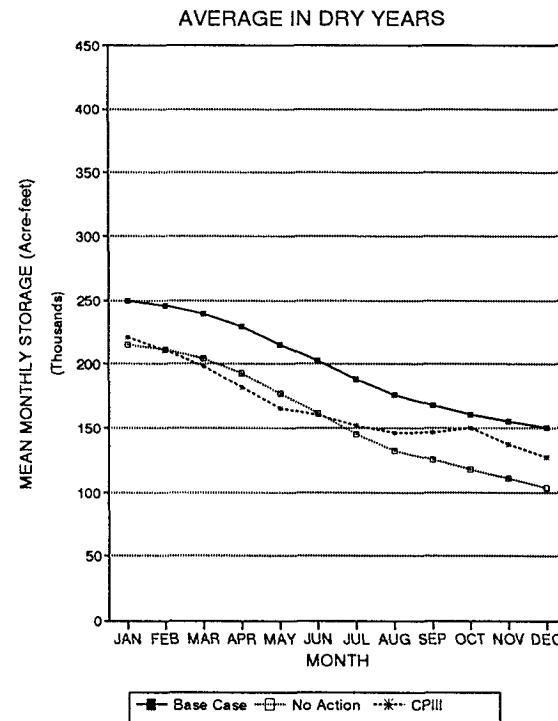
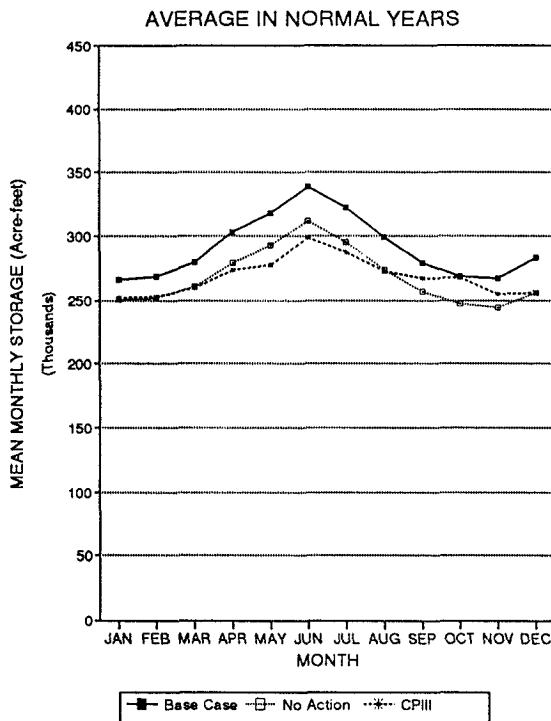
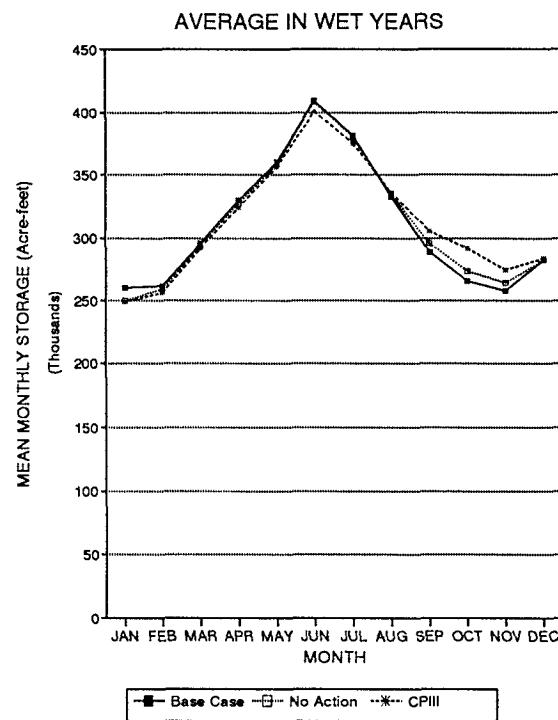
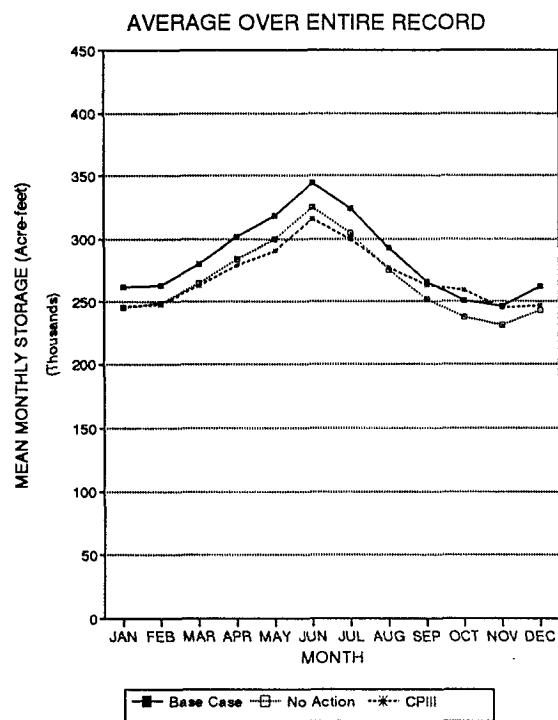
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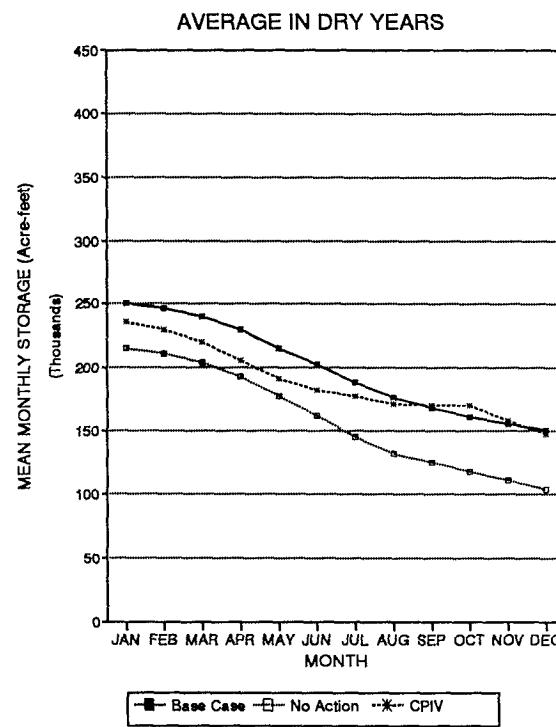
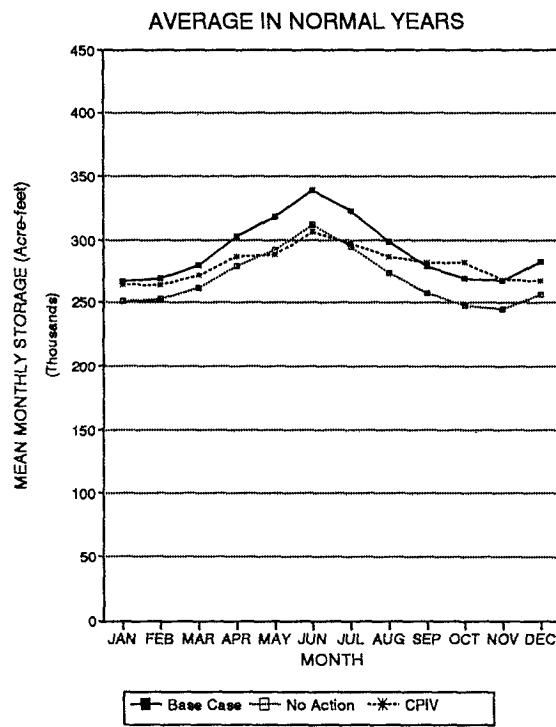
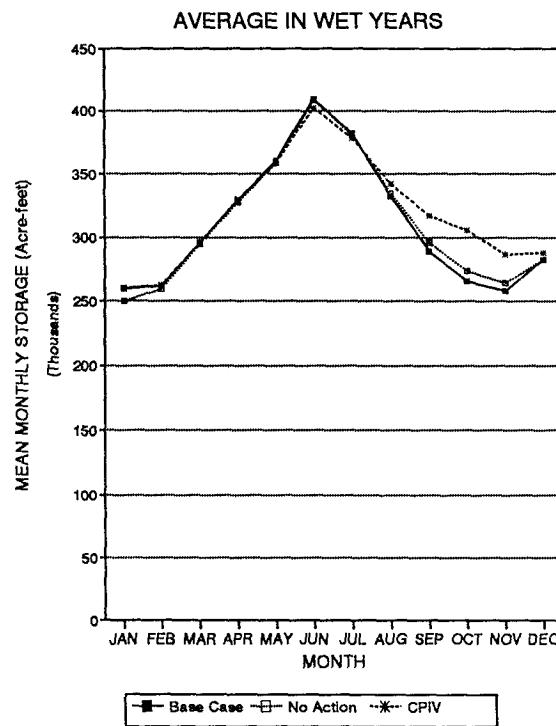
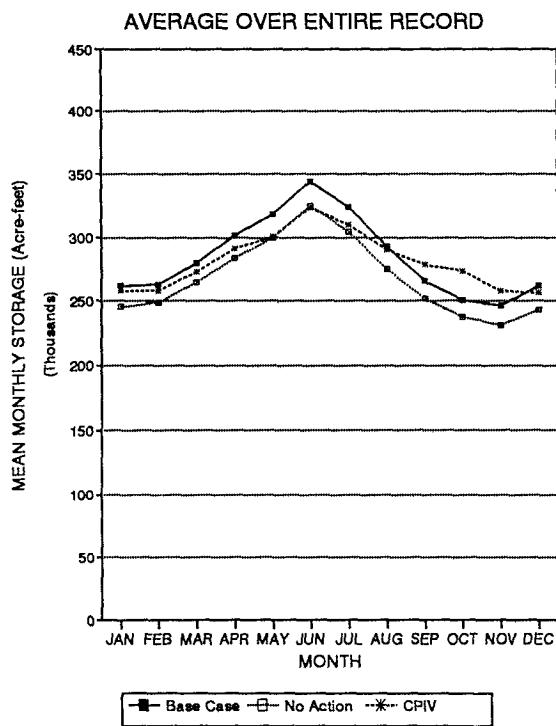
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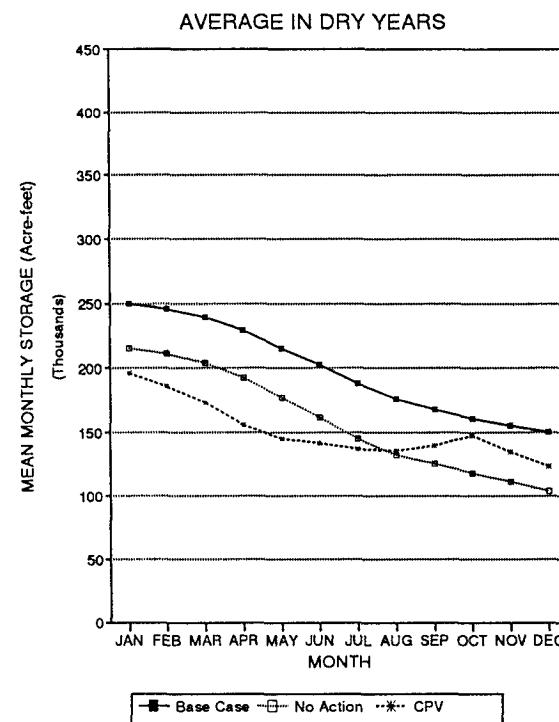
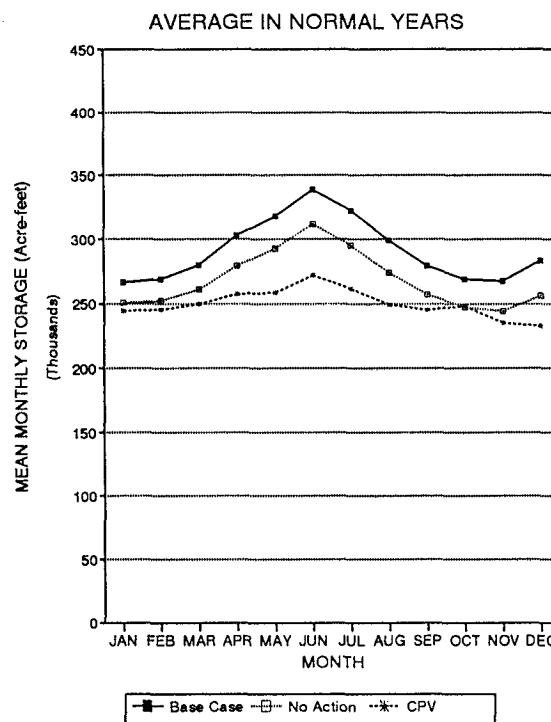
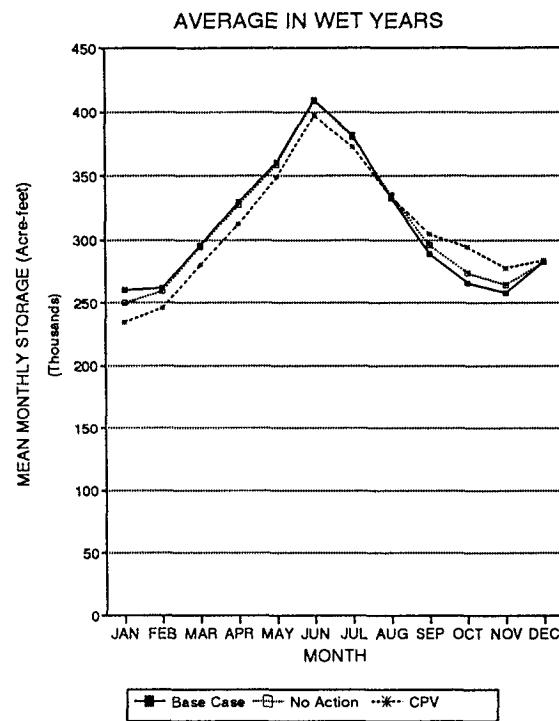
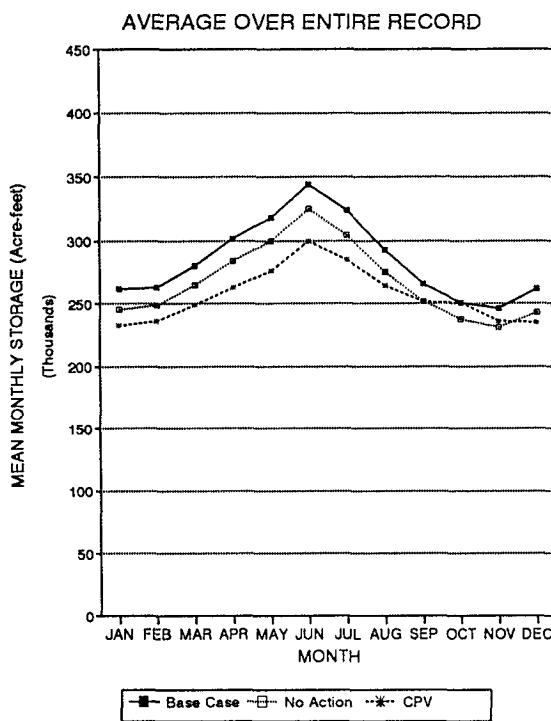
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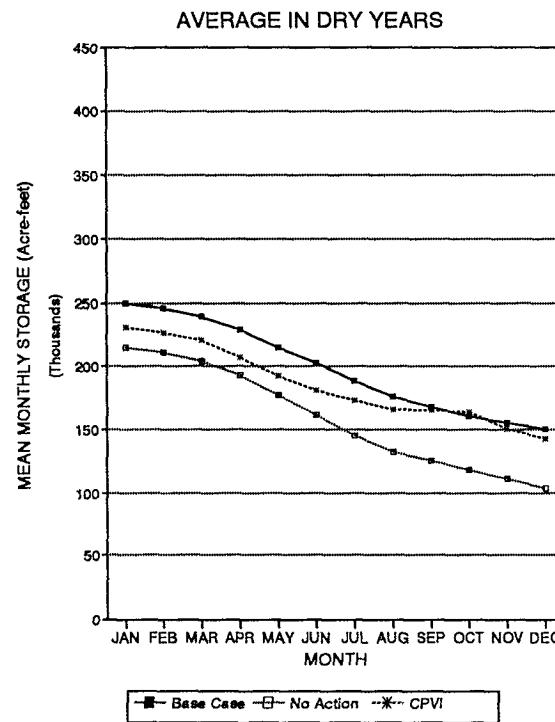
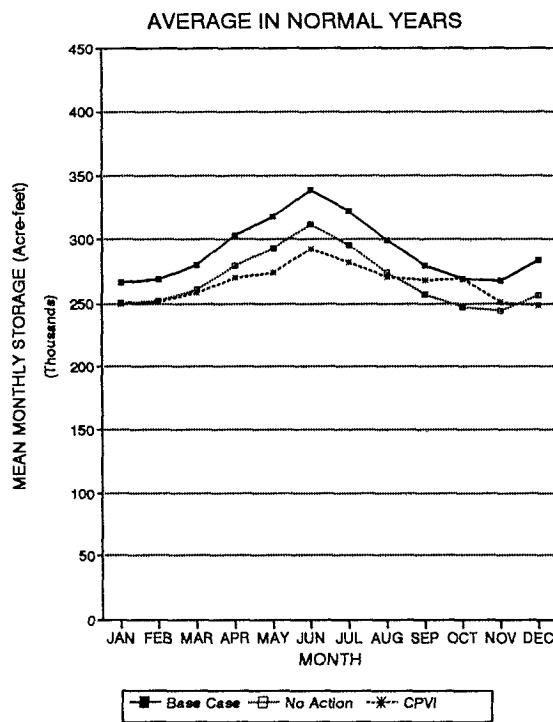
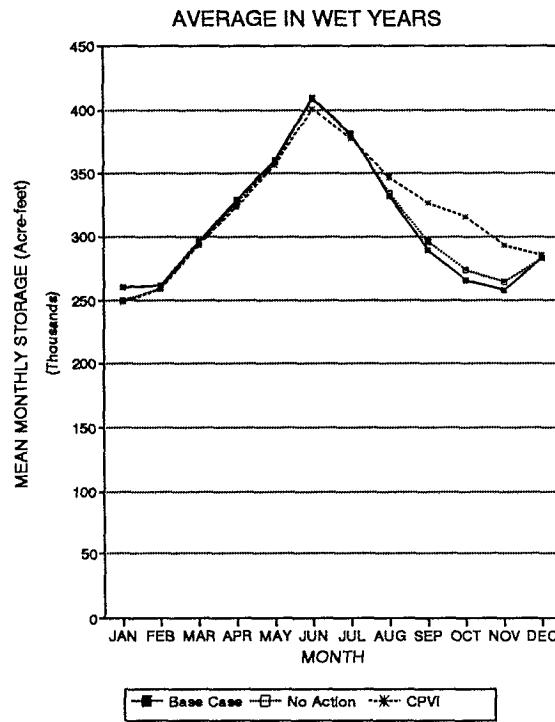
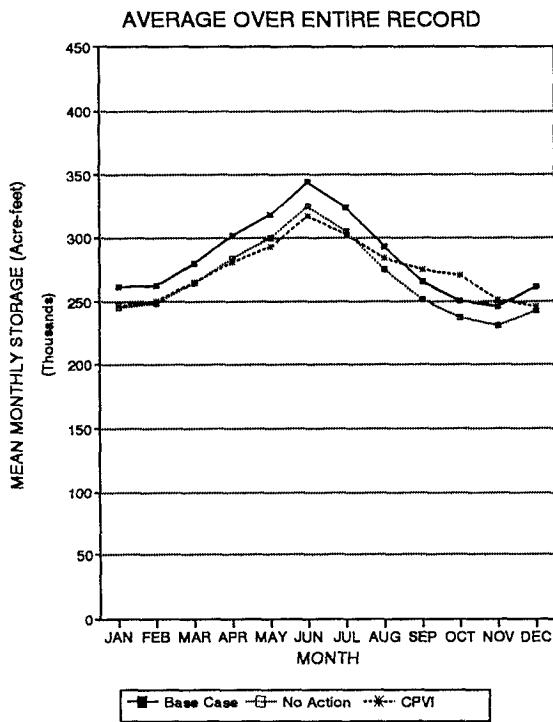
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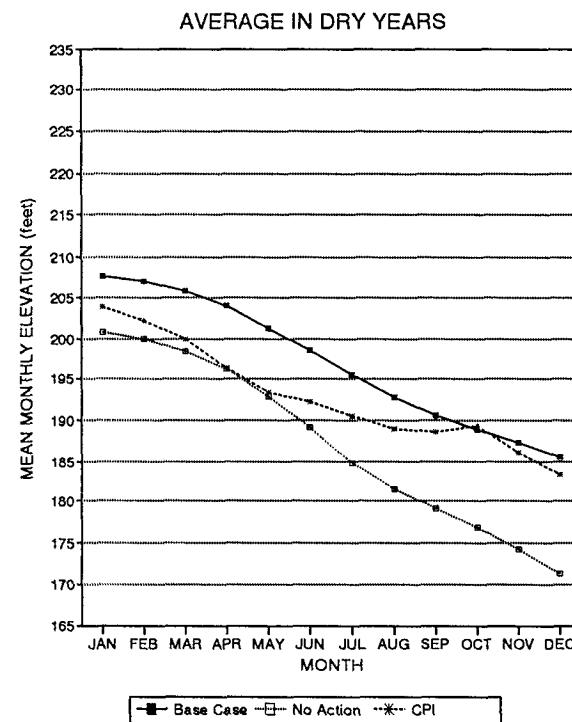
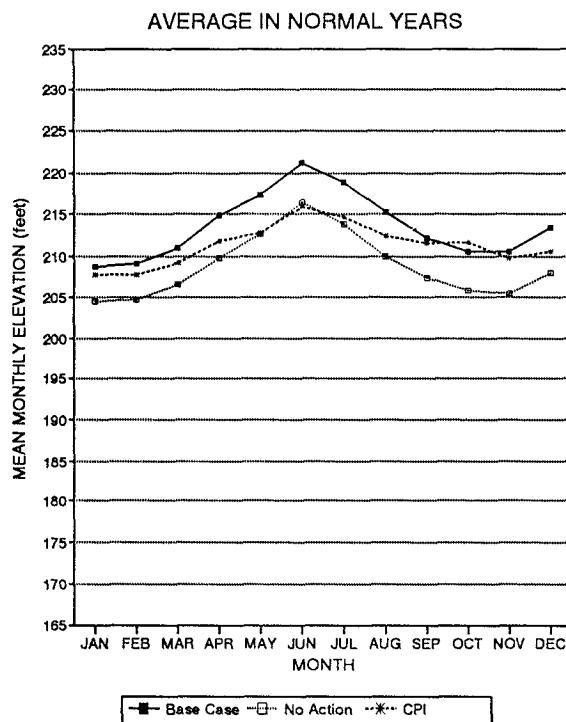
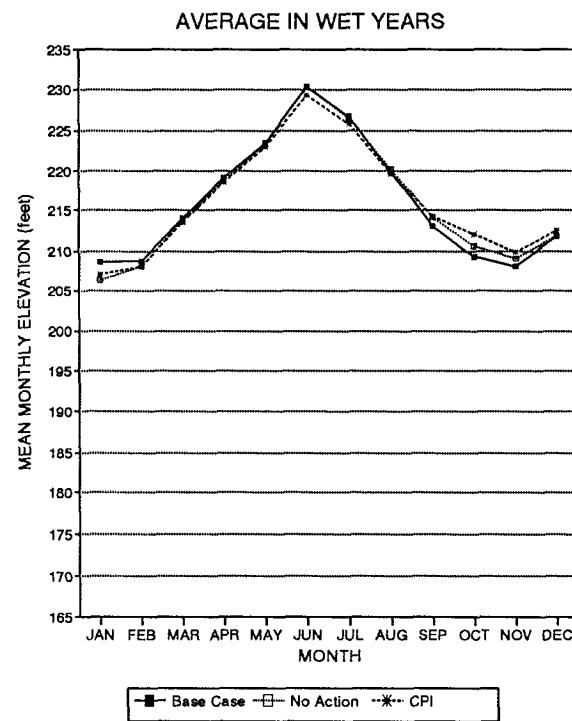
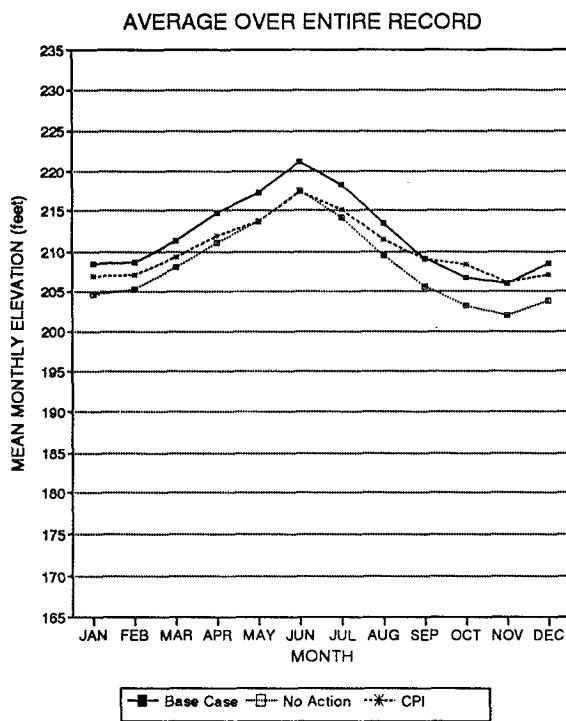
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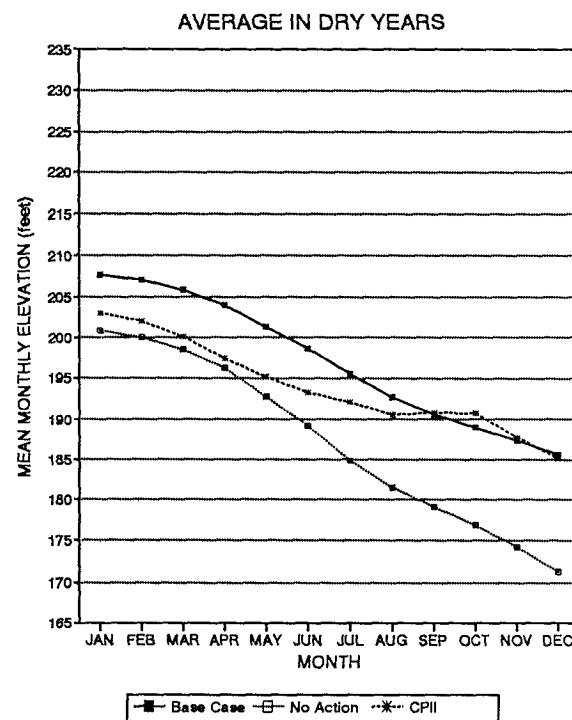
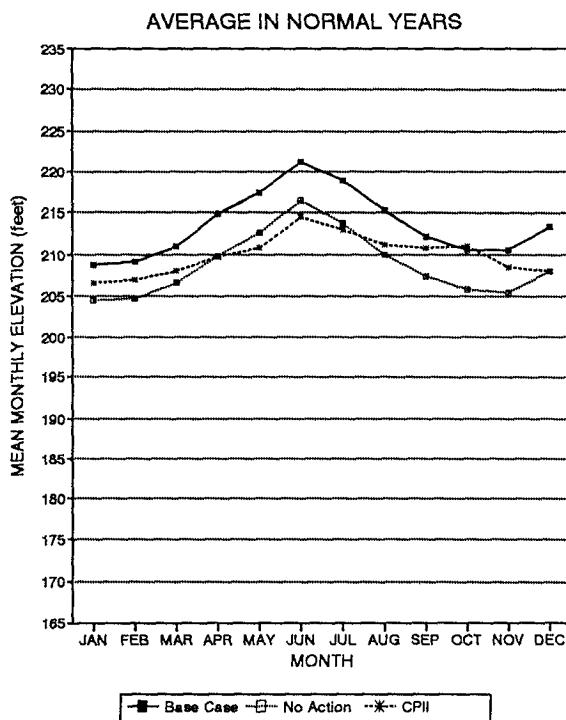
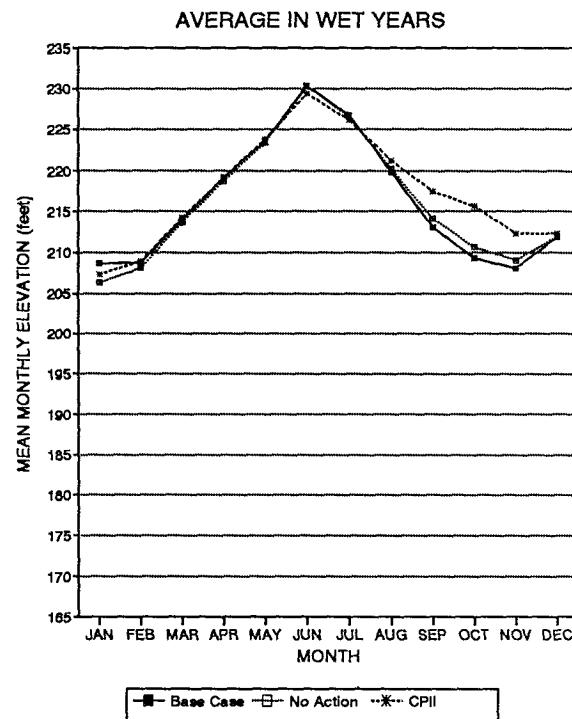
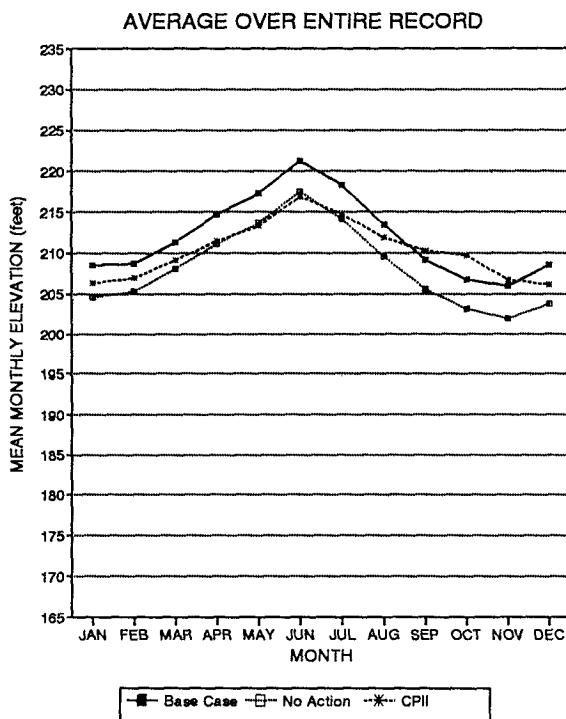
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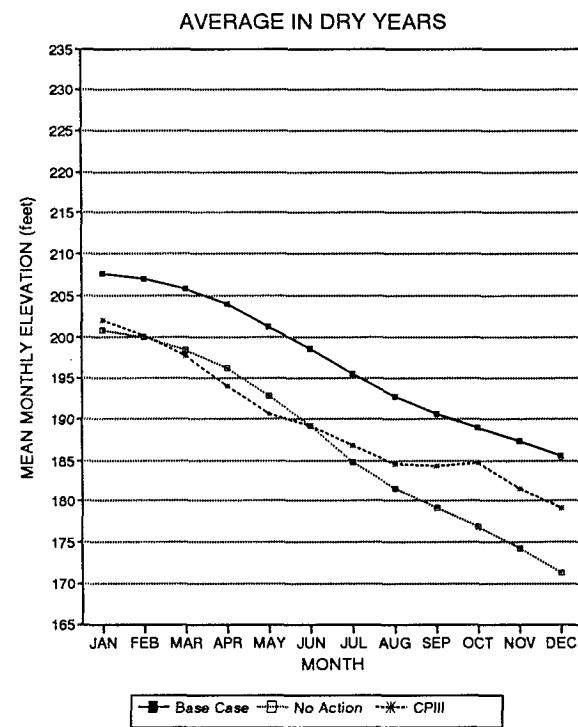
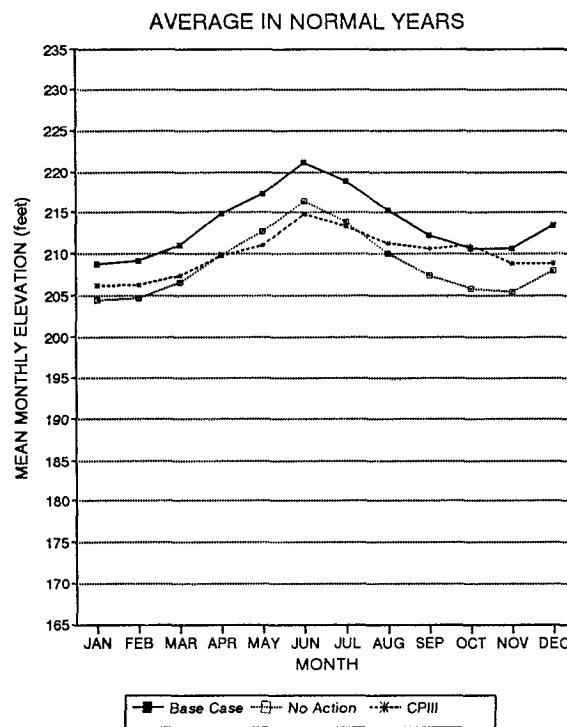
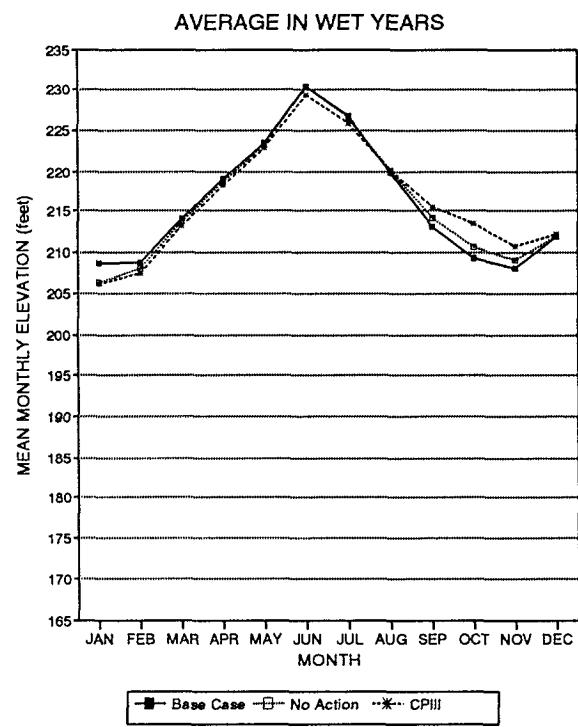
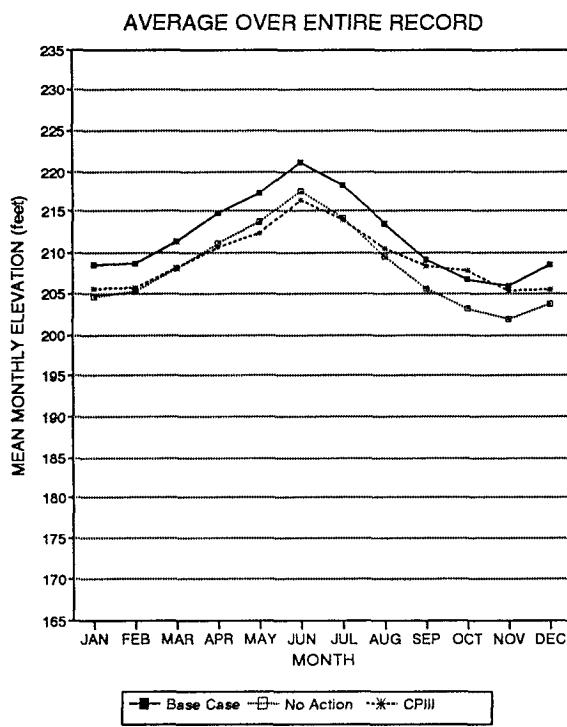
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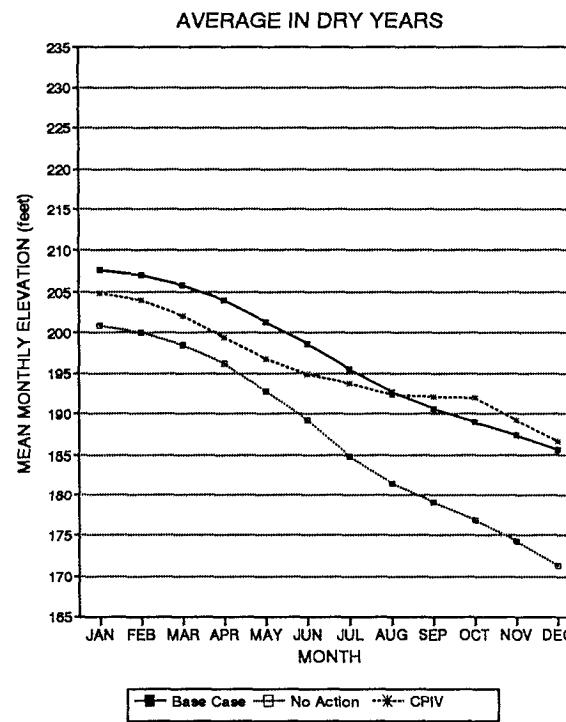
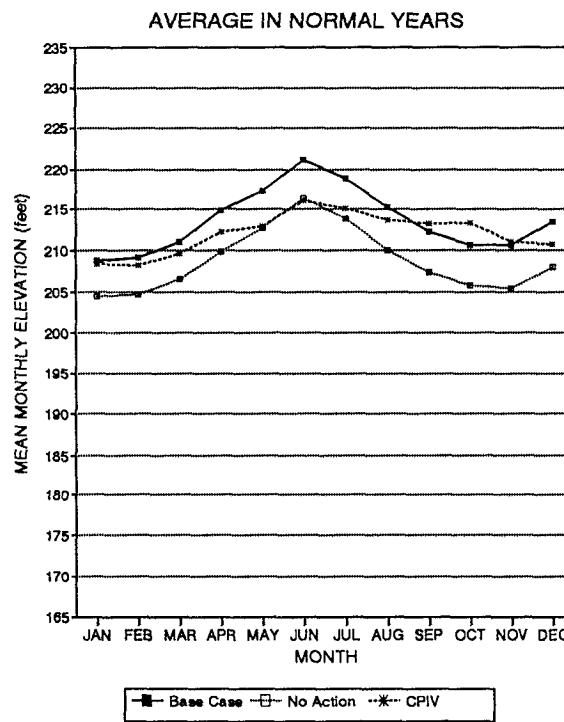
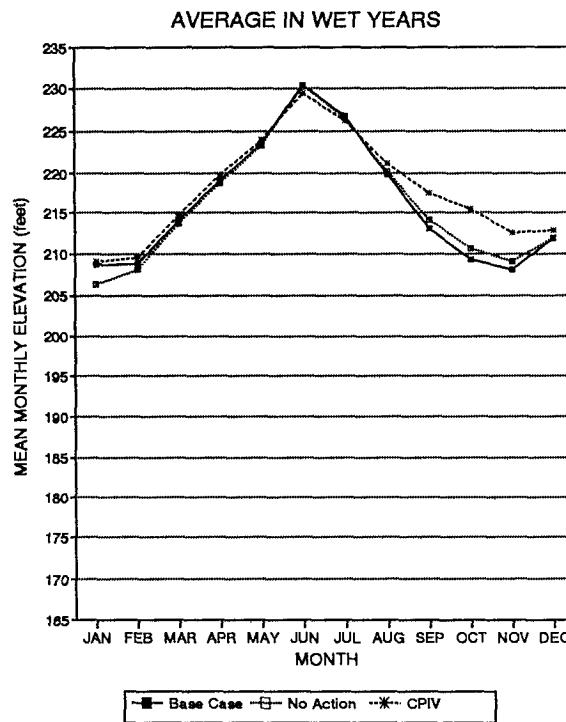
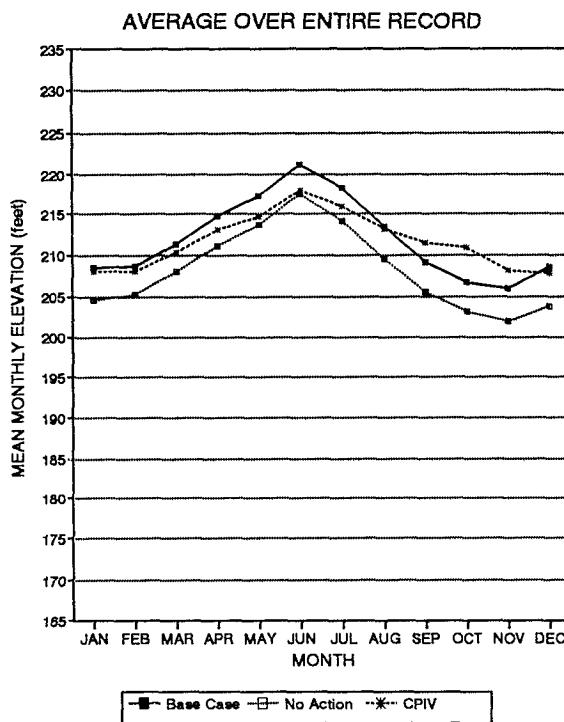
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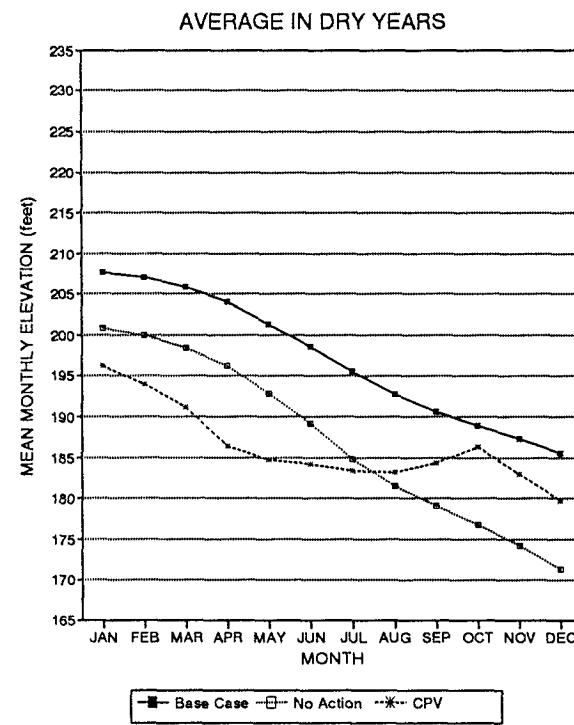
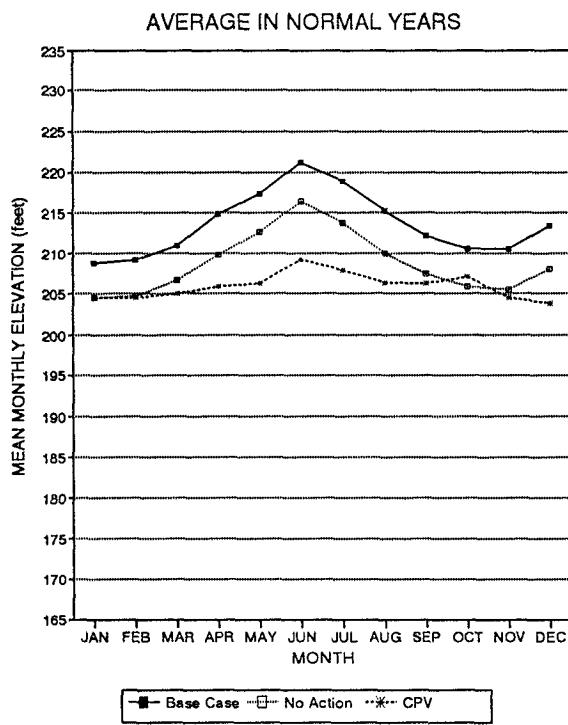
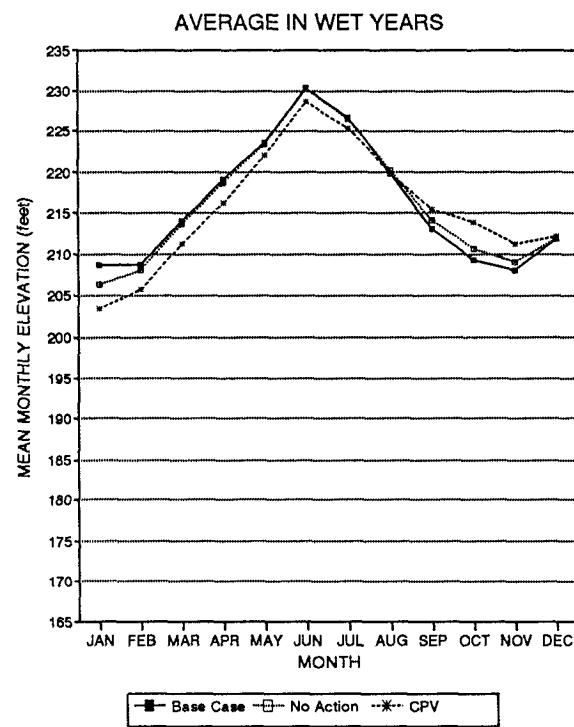
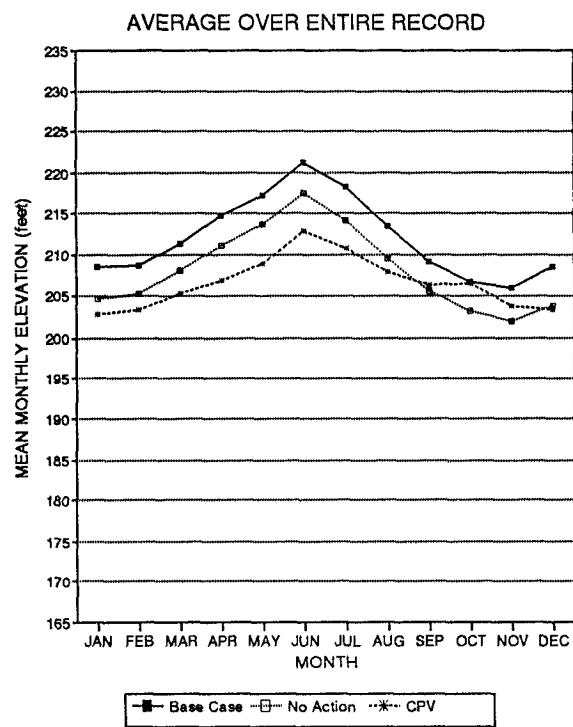
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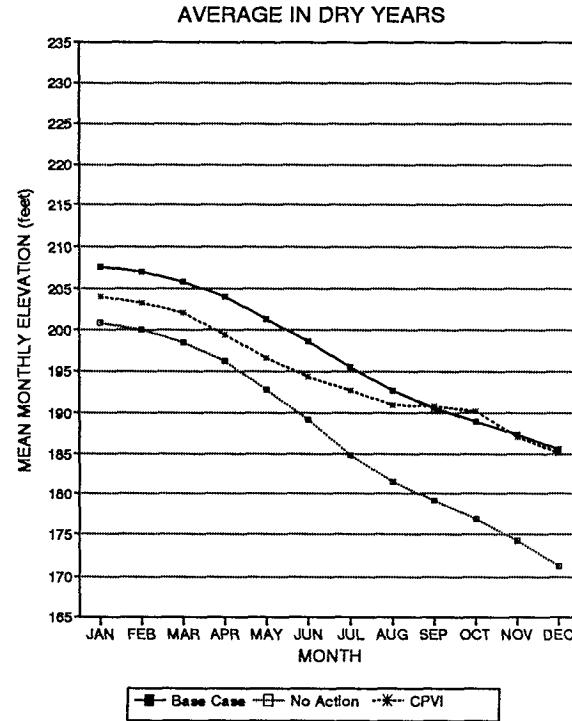
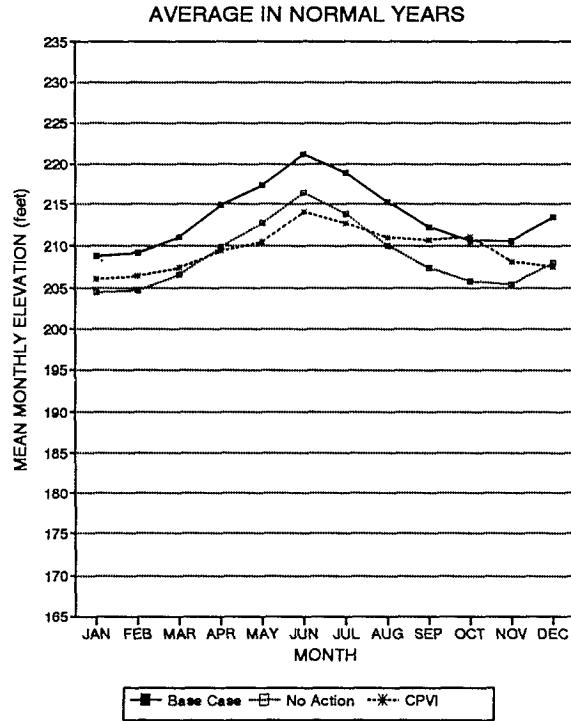
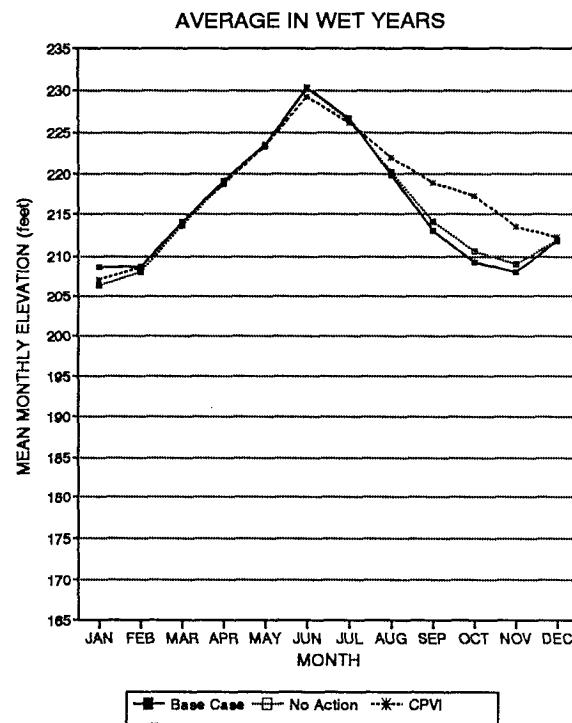
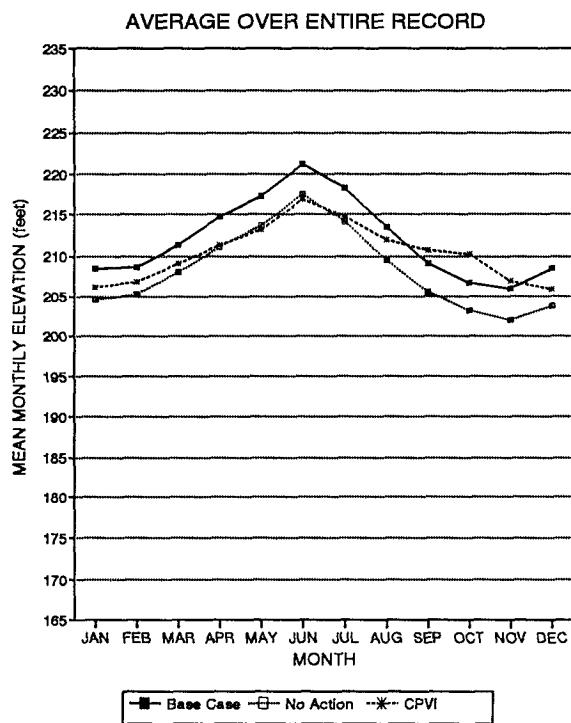
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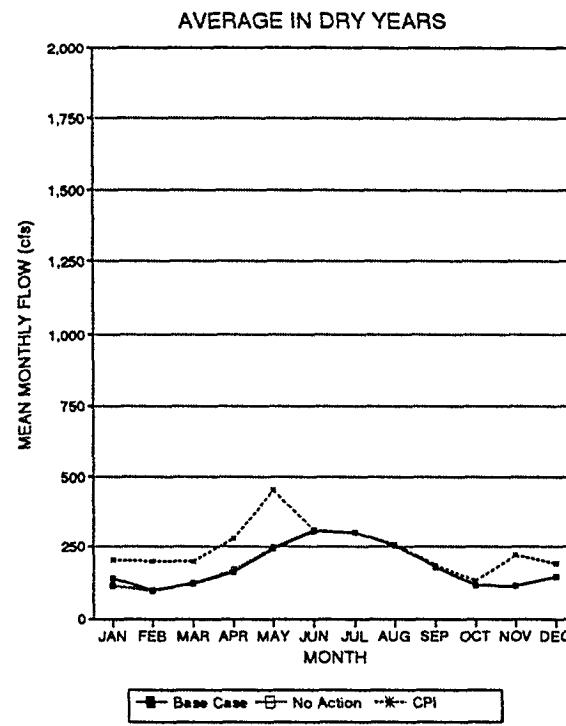
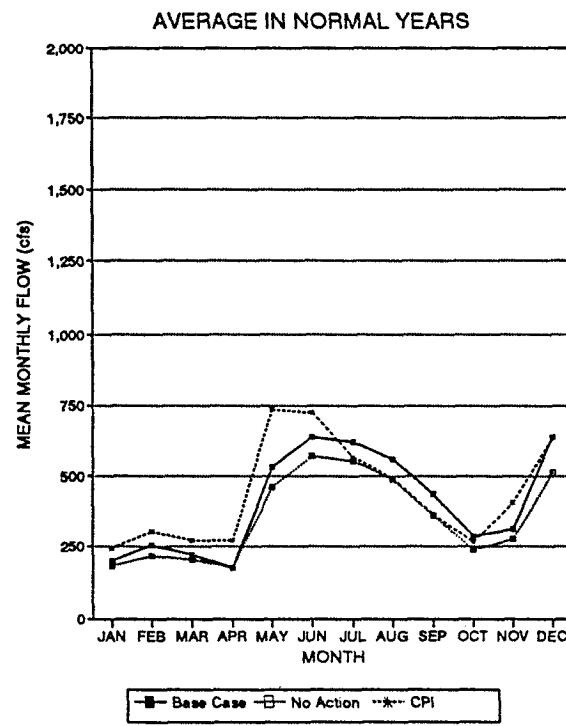
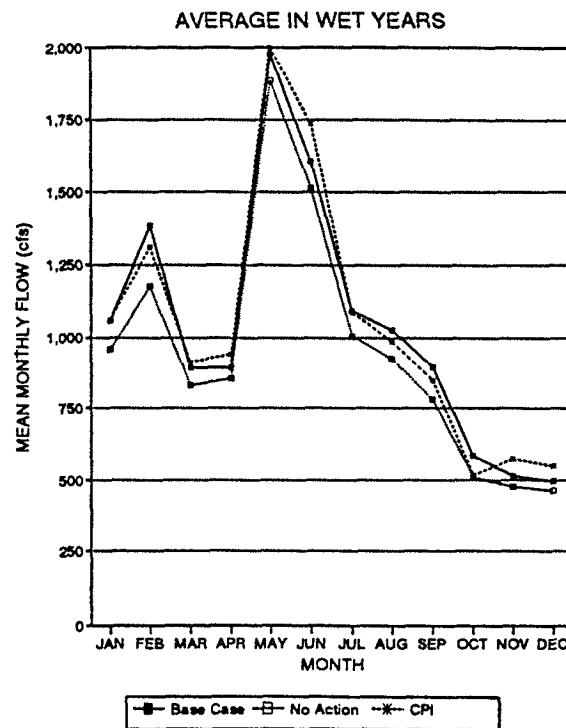
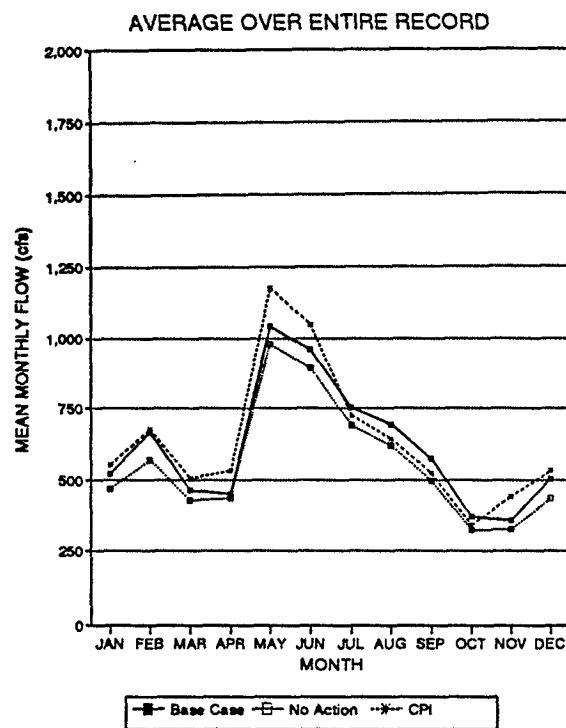


# CAMANCHE RESERVOIR ELEVATION SIMULATION FROM 1921-1990 HYDROLOGY DATABASE



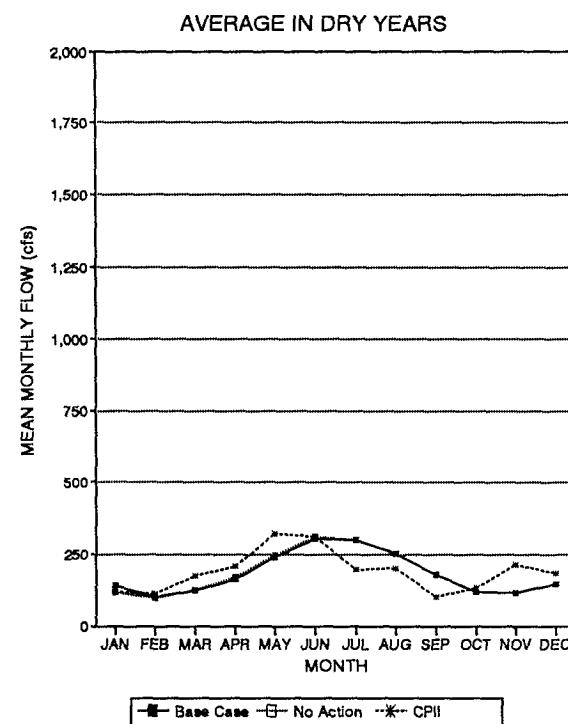
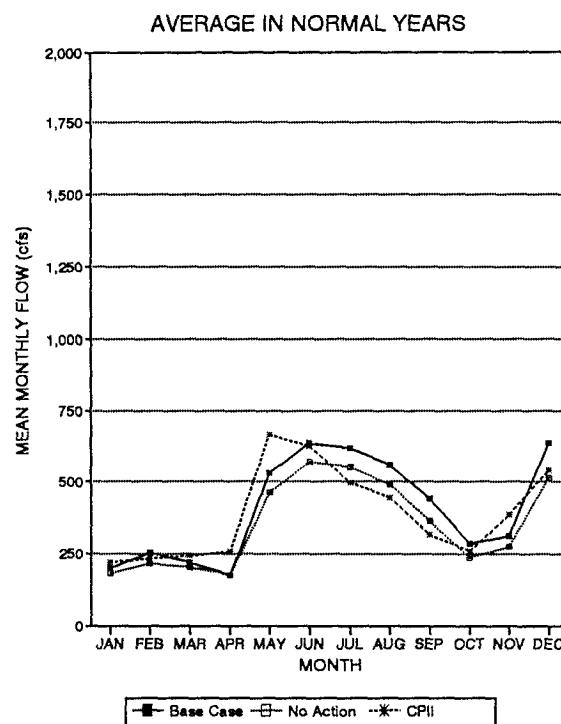
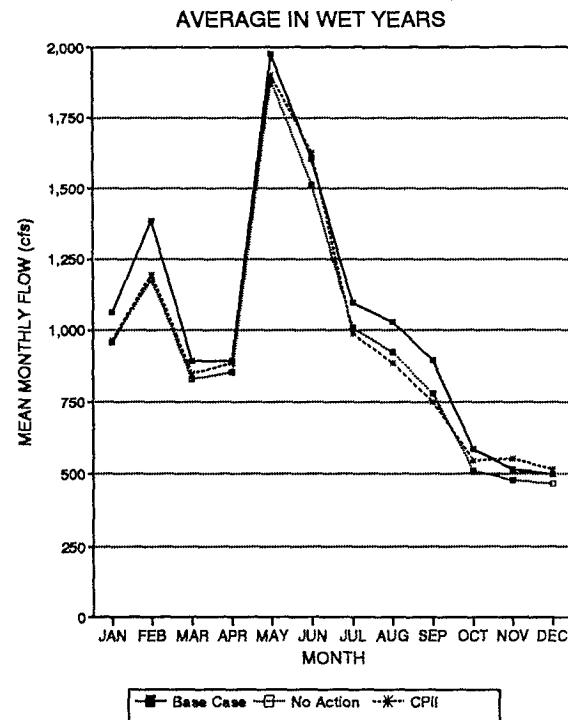
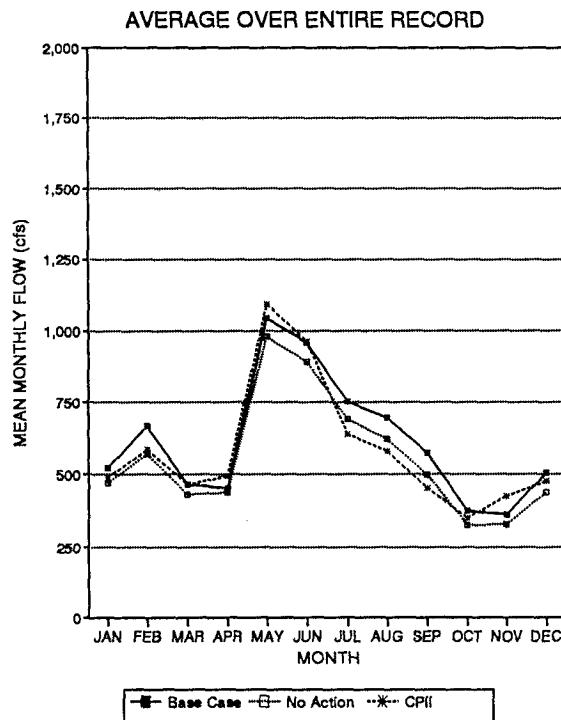
# CAMANCHE RELEASES

## SIMULATION FROM 1921-1990 HYDROLOGY DATABASE



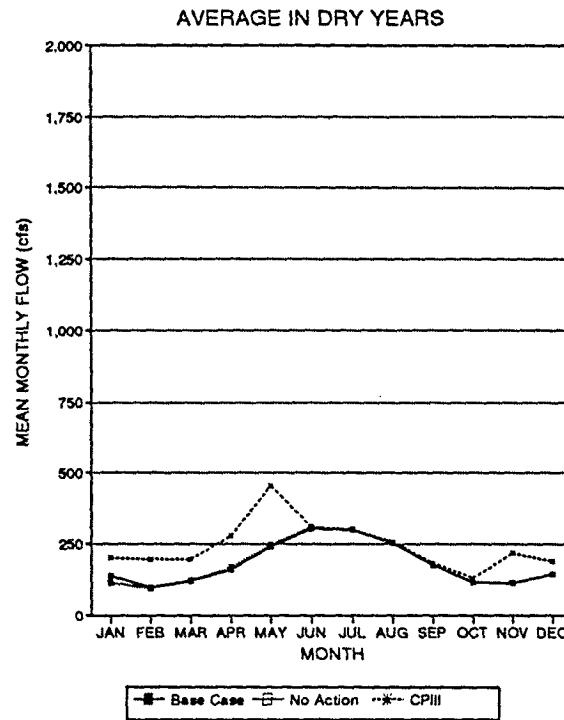
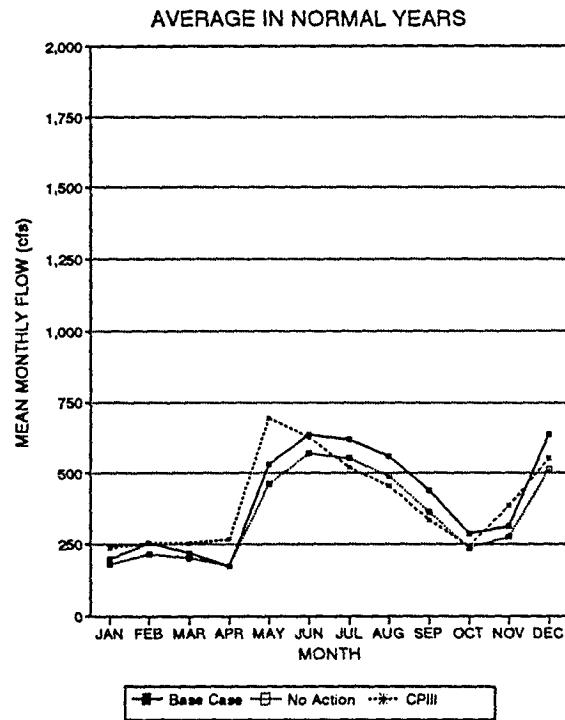
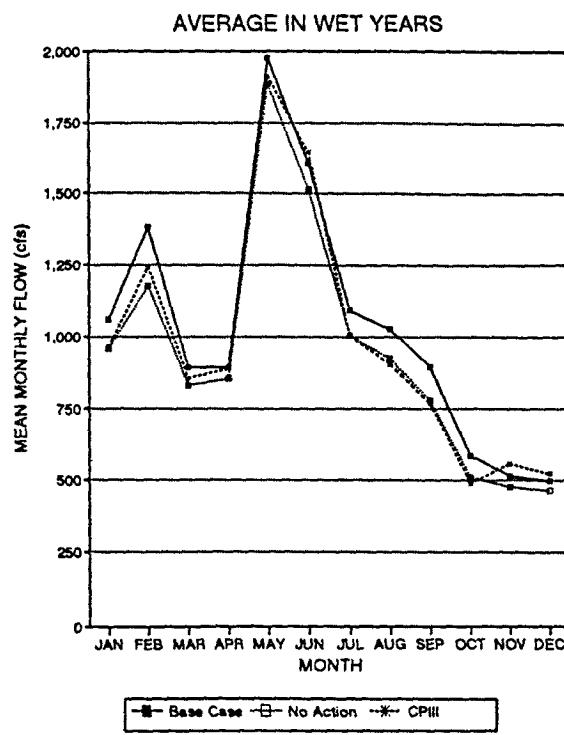
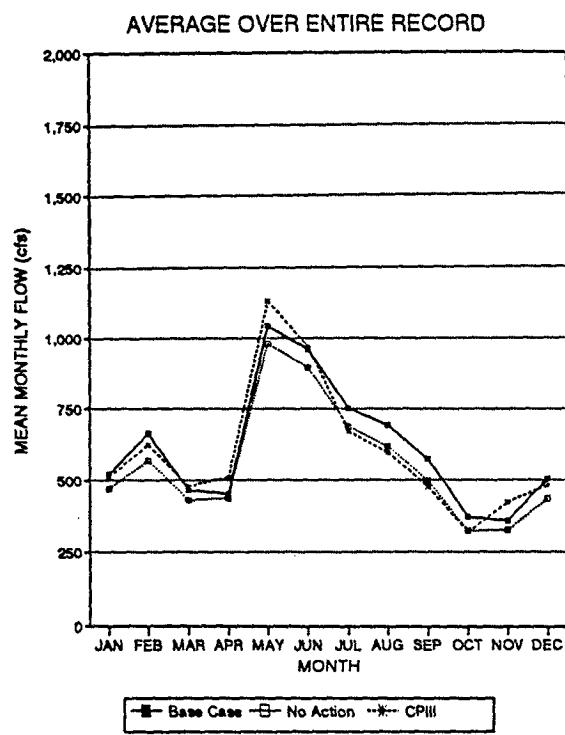
# CAMANCHE RELEASES

## SIMULATION FROM 1921-1990 HYDROLOGY DATABASE



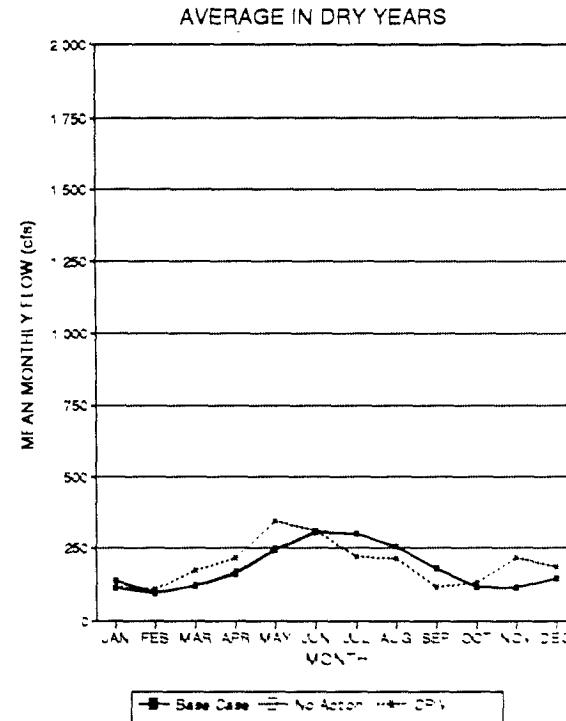
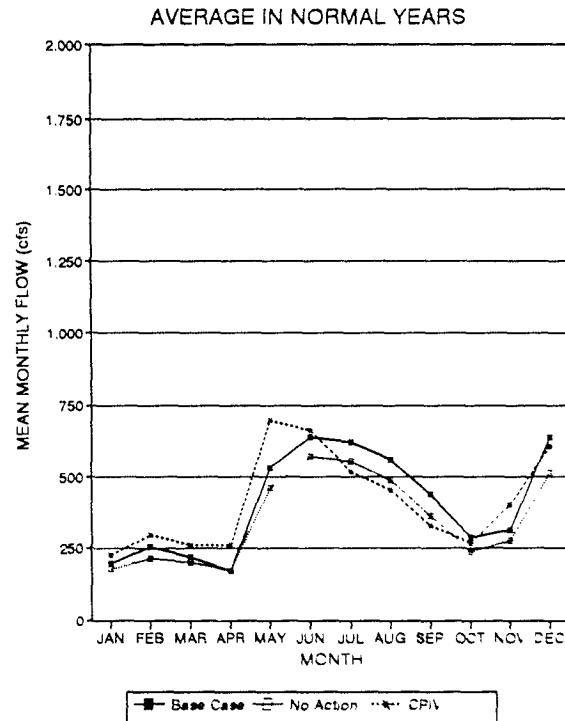
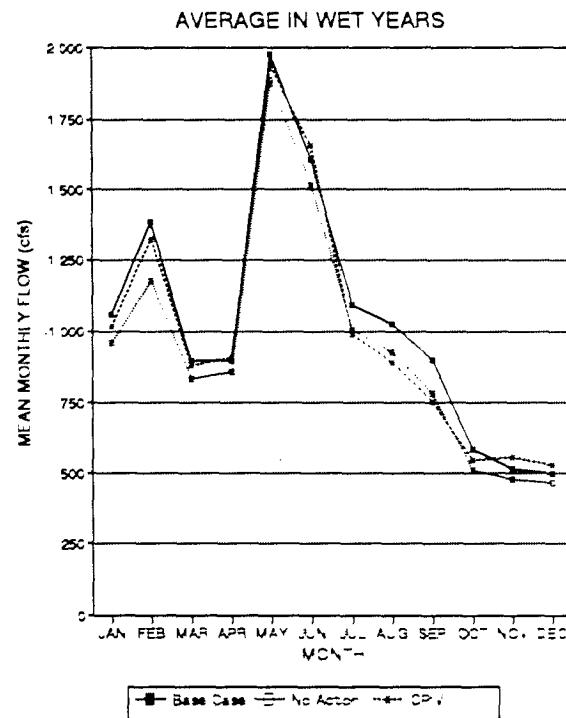
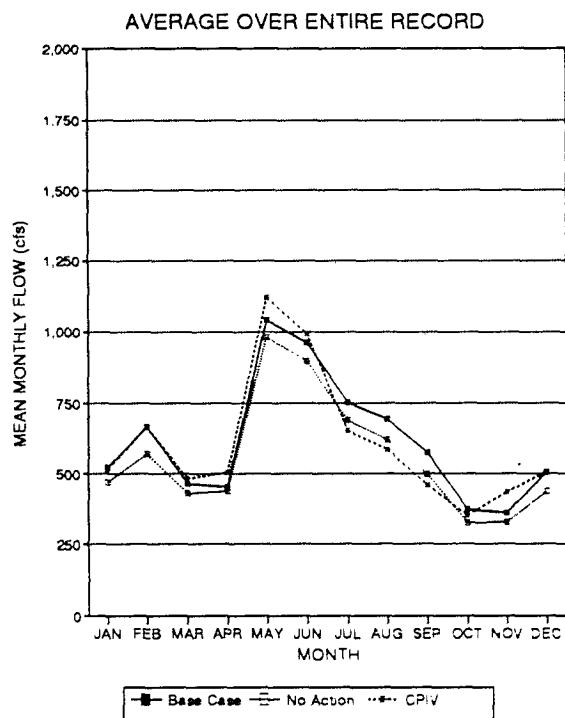
# CAMANCHE RELEASES

## SIMULATION FROM 1921-1990 HYDROLOGY DATABASE



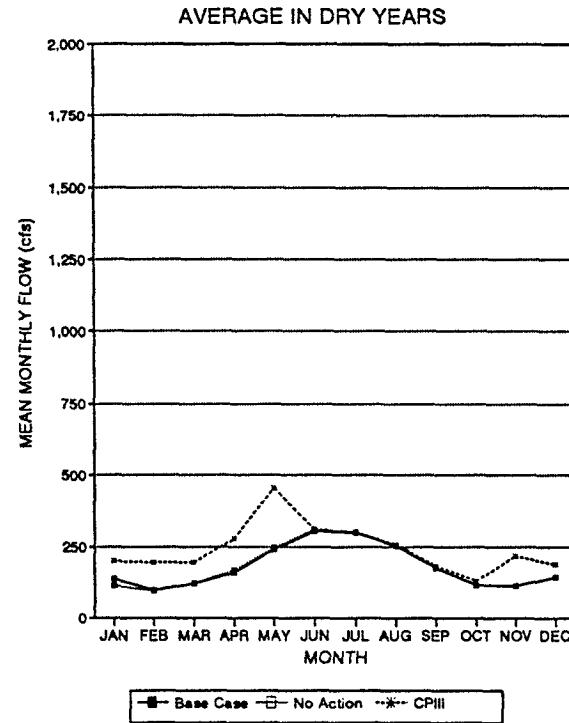
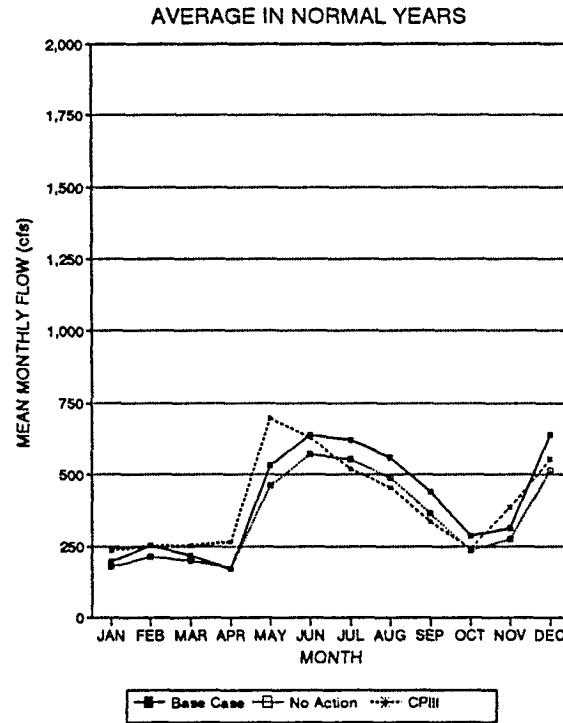
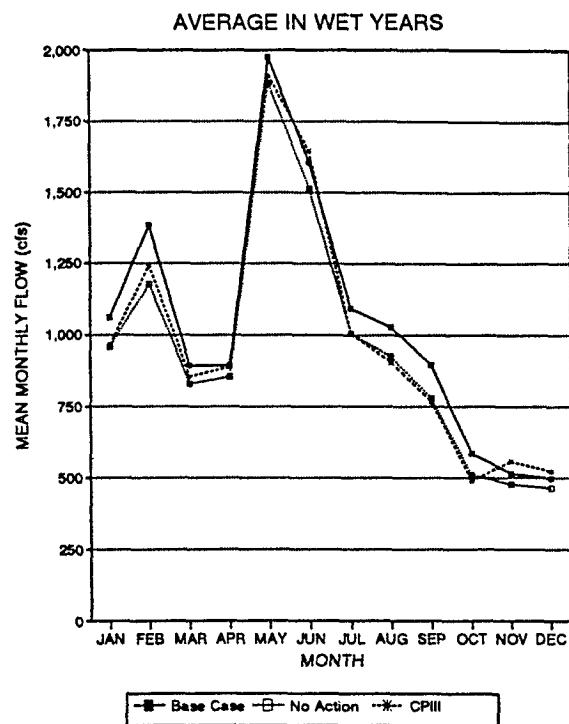
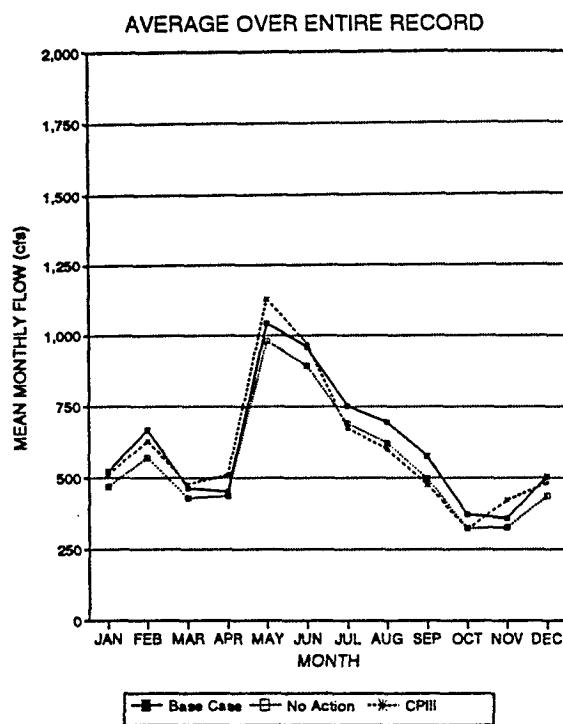
# CAMANCHE RELEASES

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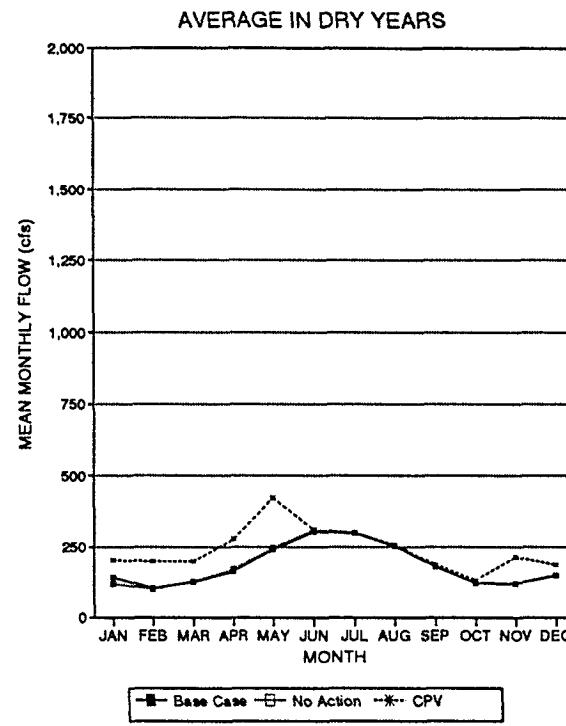
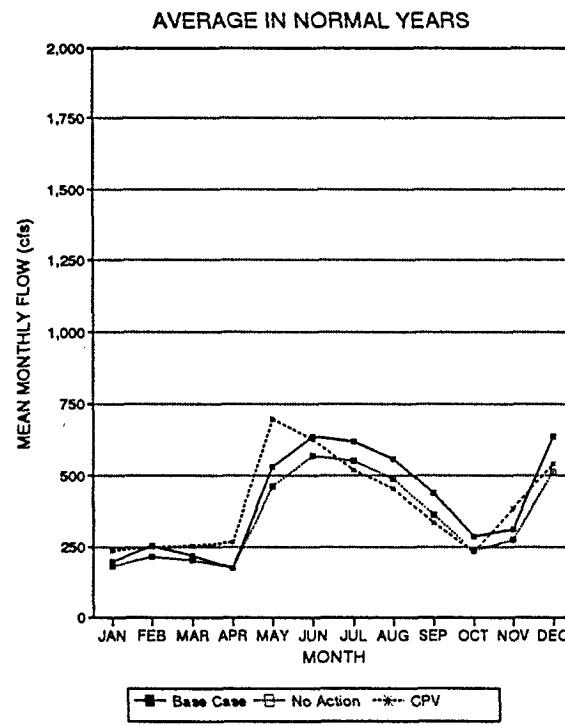
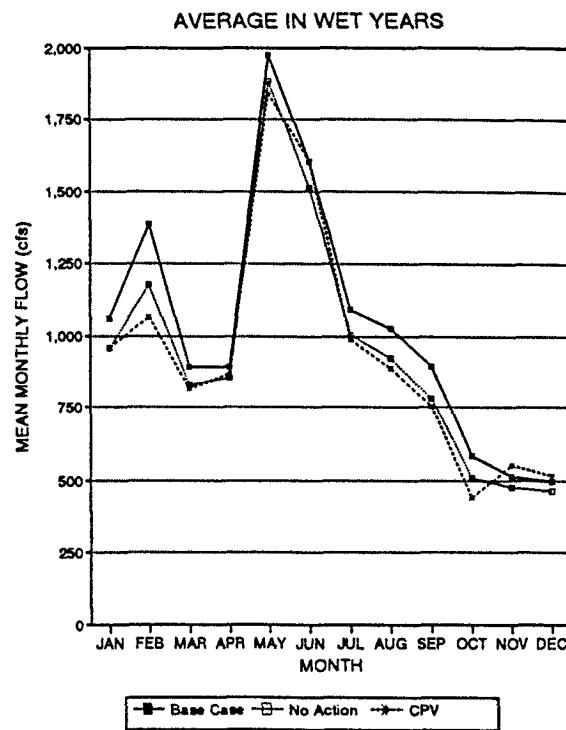
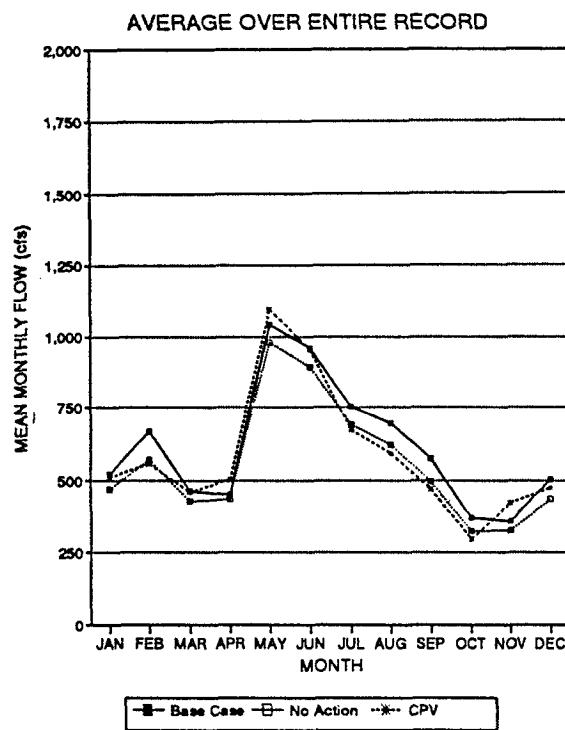
# CAMANCHE RELEASES

## SIMULATION FROM 1921-1990 HYDROLOGY DATABASE



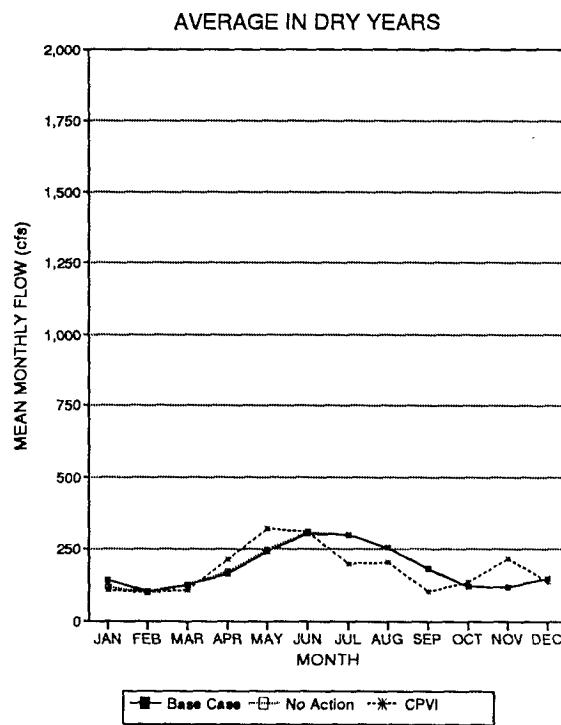
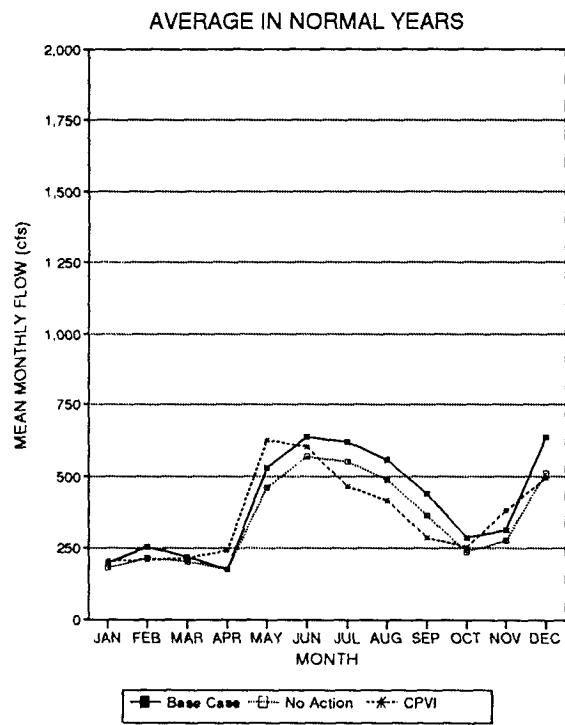
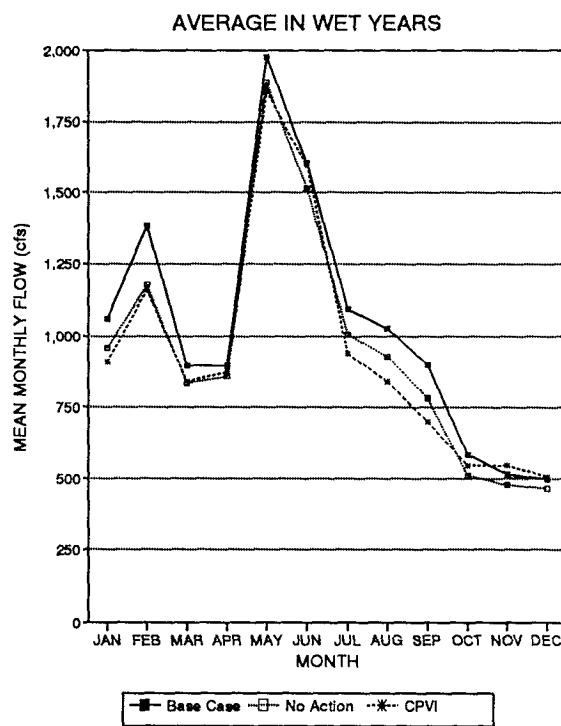
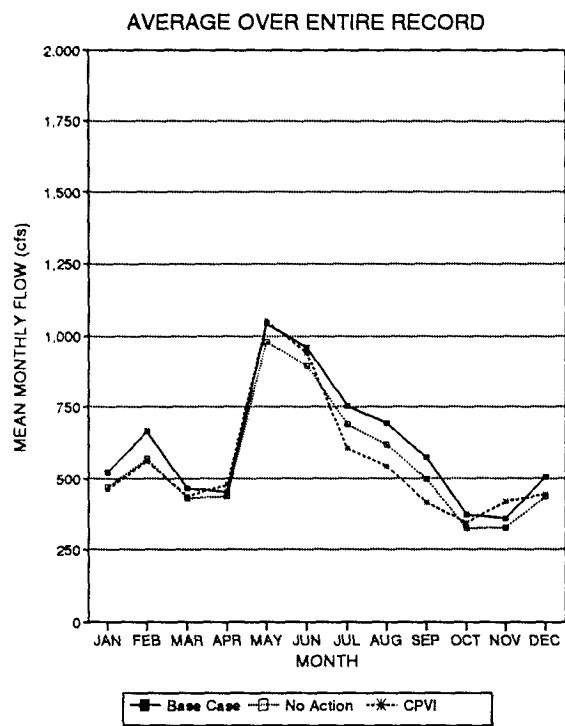
# CAMANCHE RELEASES

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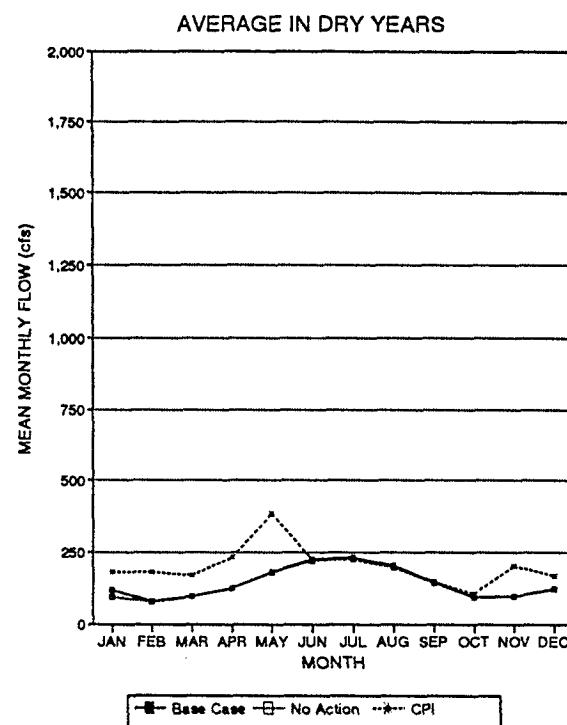
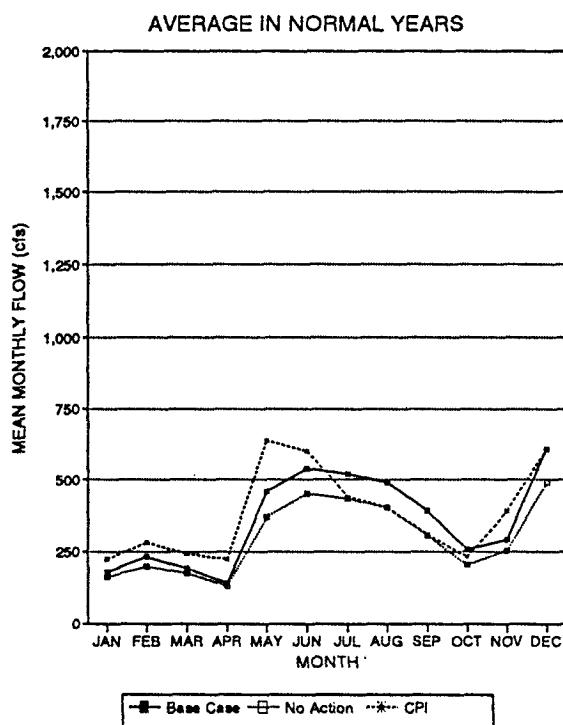
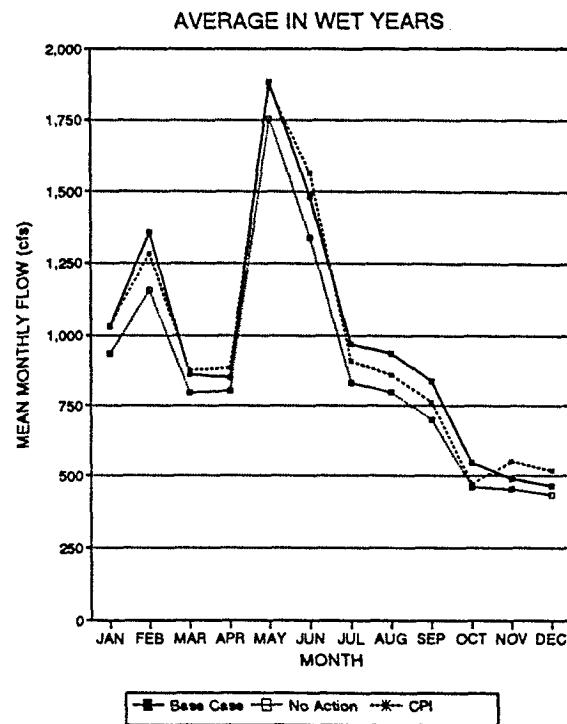
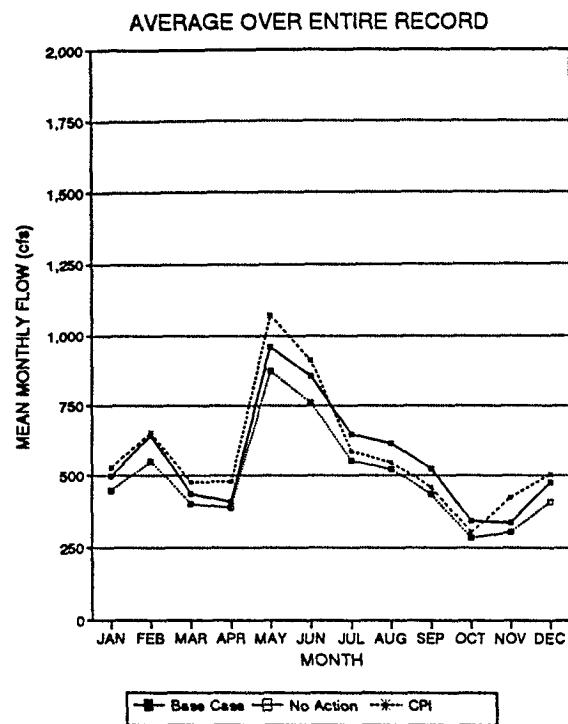
# CAMANCHE RELEASES

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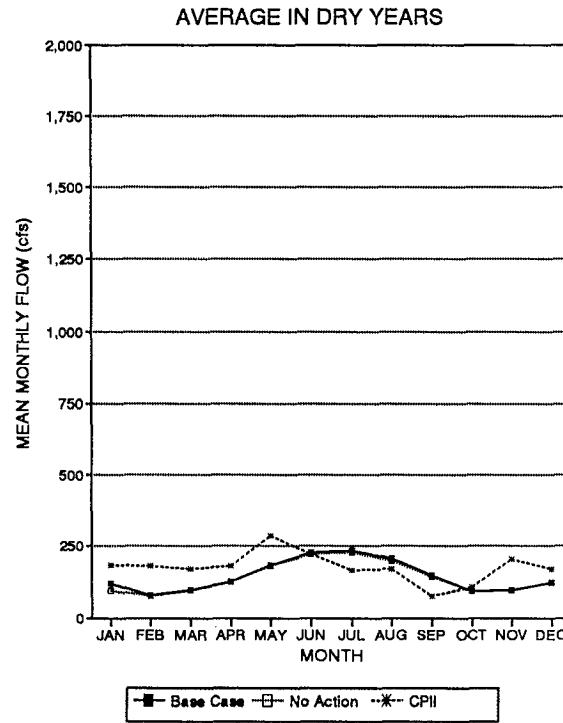
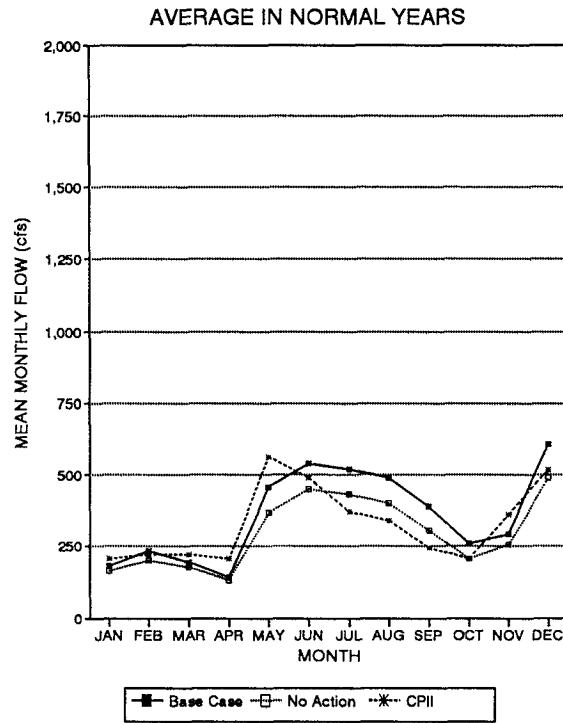
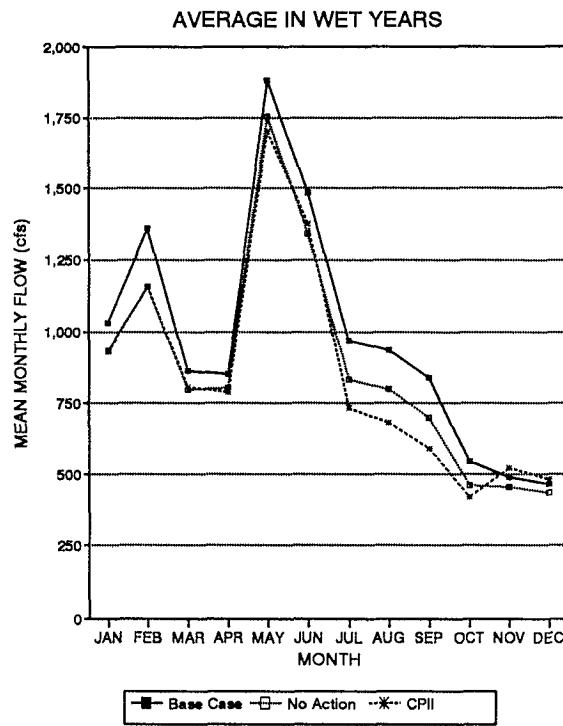
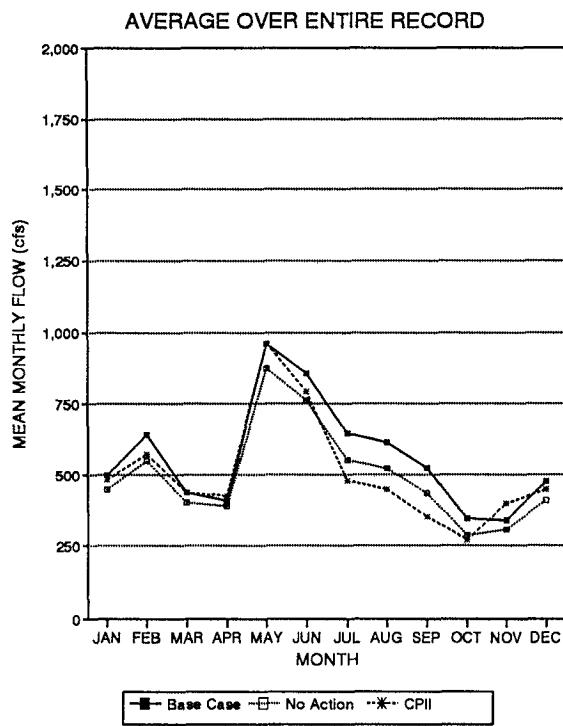
# FLOW AT VICTOR (BRUELLA ROAD)

## SIMULATION FROM 1921-1990 HYDROLOGY DATABASE



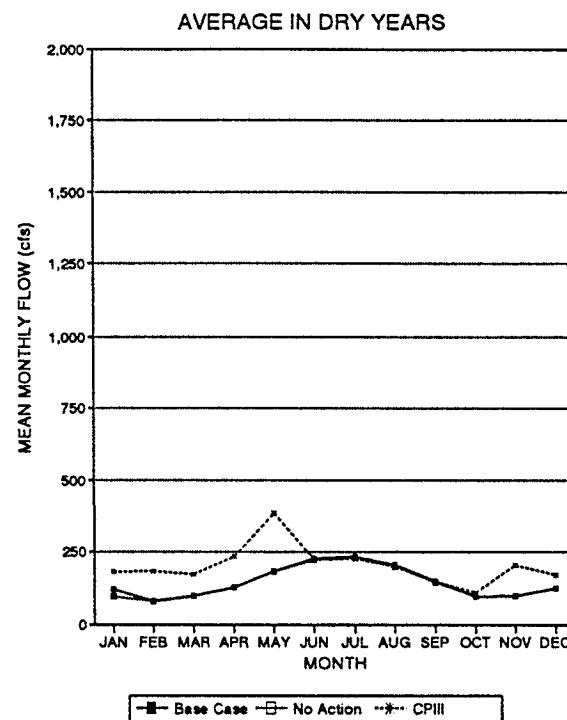
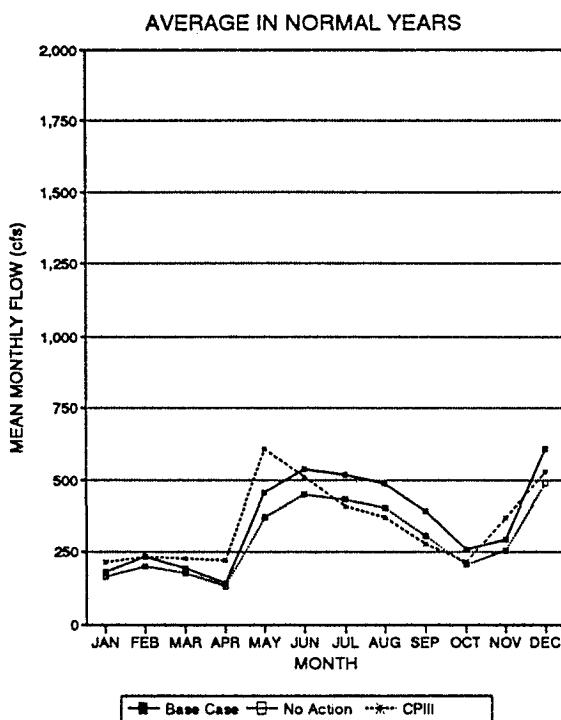
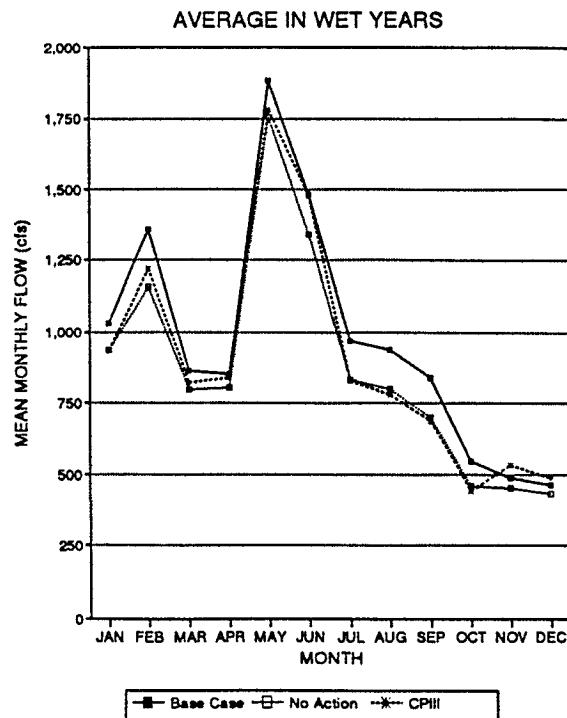
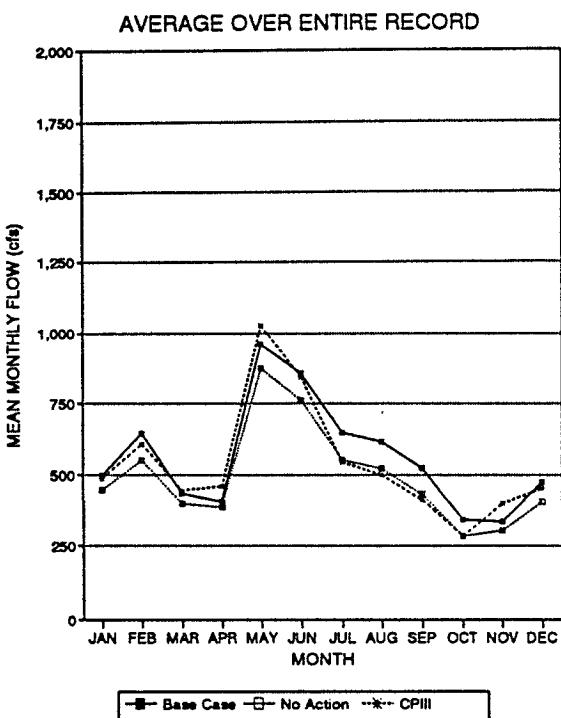
# FLOW AT VICTOR (BRUELLA ROAD)

## SIMULATION FROM 1921-1990 HYDROLOGY DATABASE



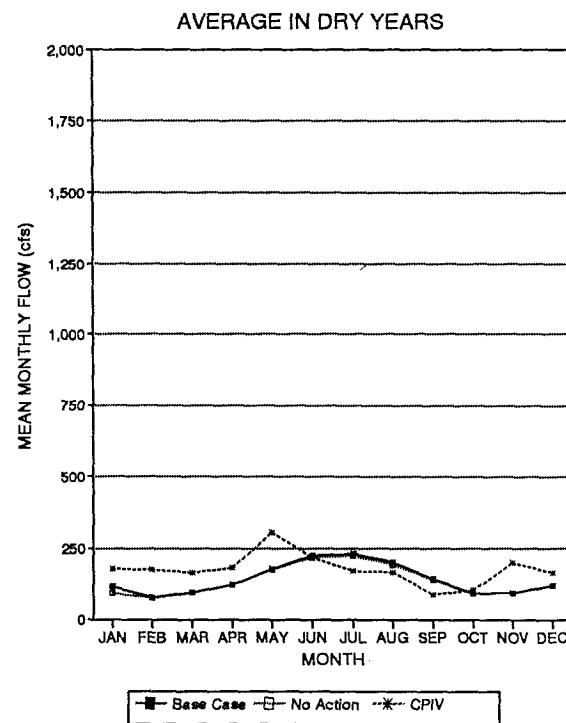
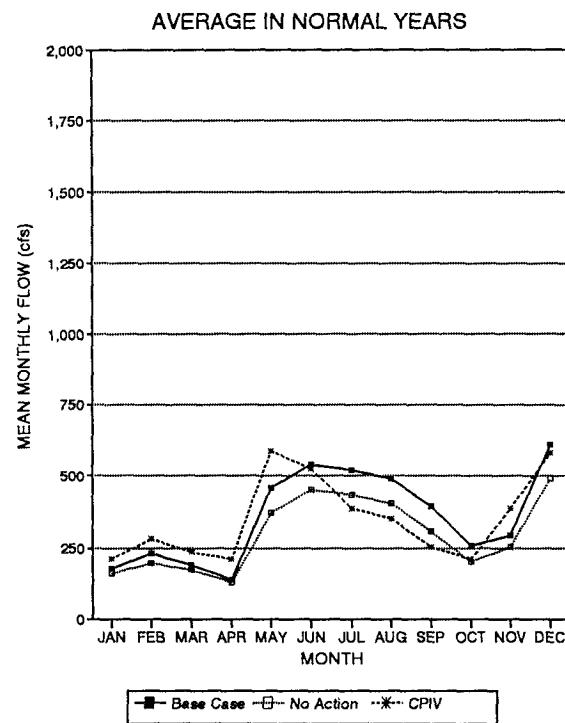
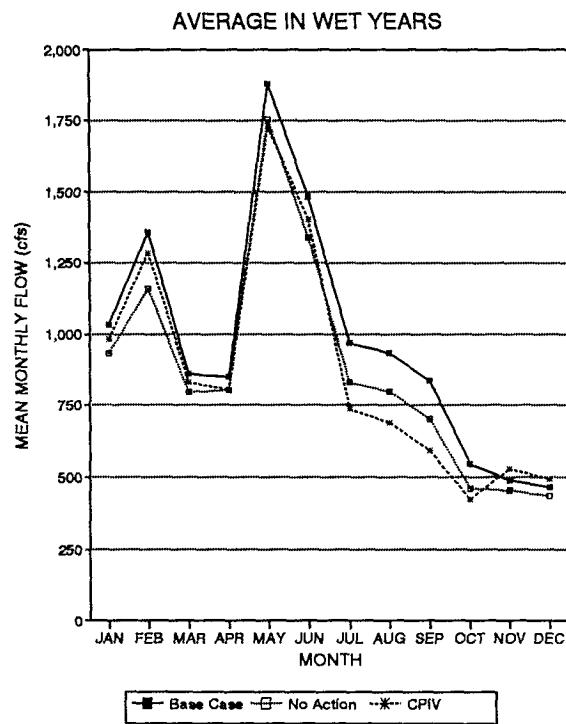
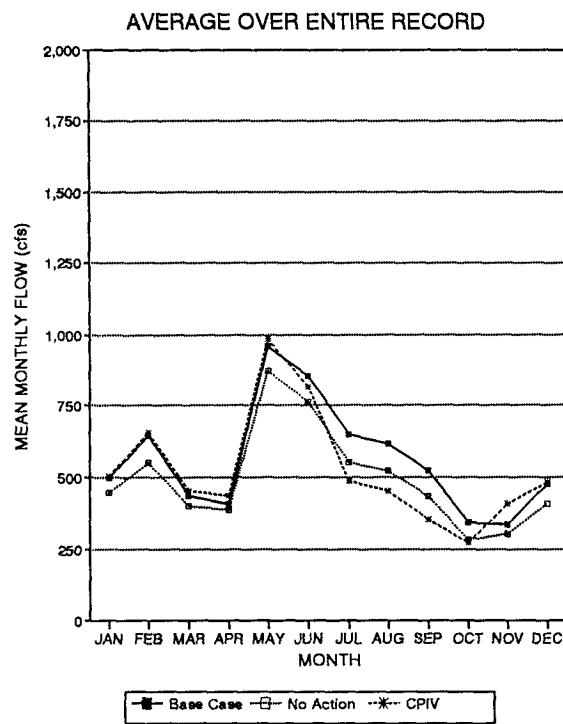
# FLOW AT VICTOR (BRUELLA ROAD)

## SIMULATION FROM 1921-1990 HYDROLOGY DATABASE



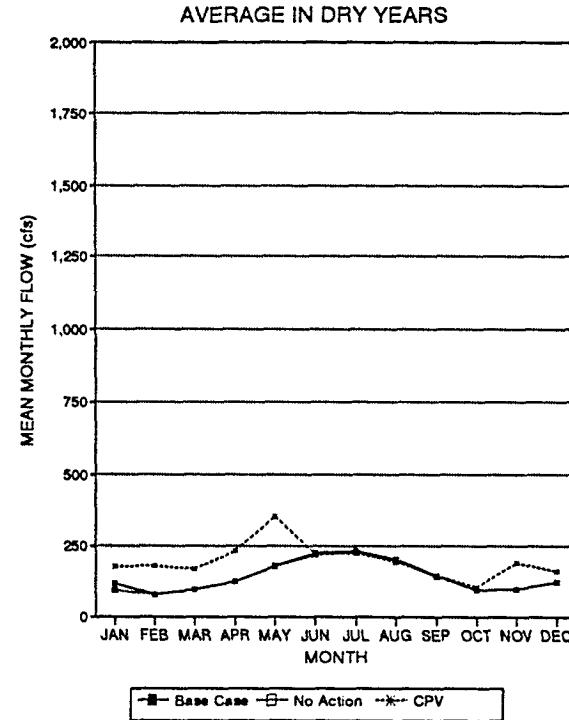
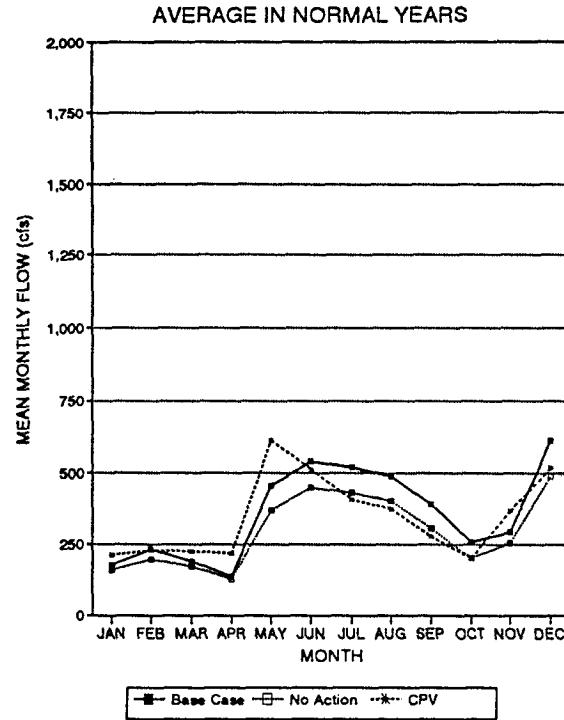
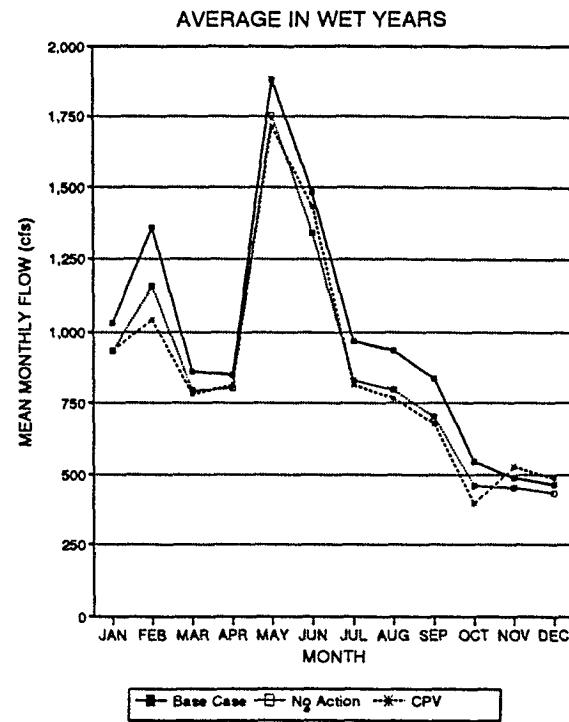
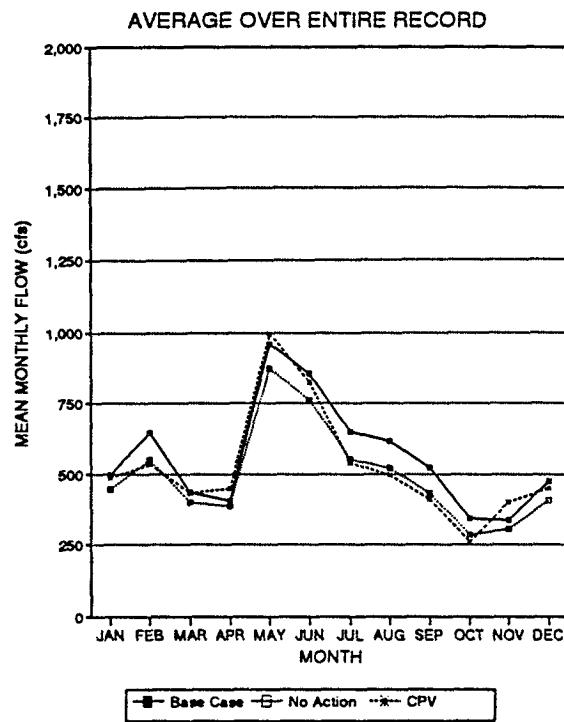
# FLOW AT VICTOR (BRUELLA ROAD)

## SIMULATION FROM 1921-1990 HYDROLOGY DATABASE



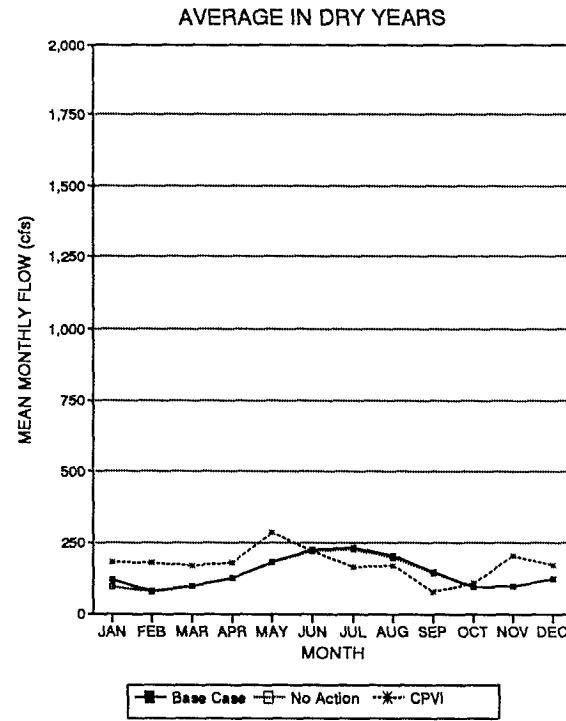
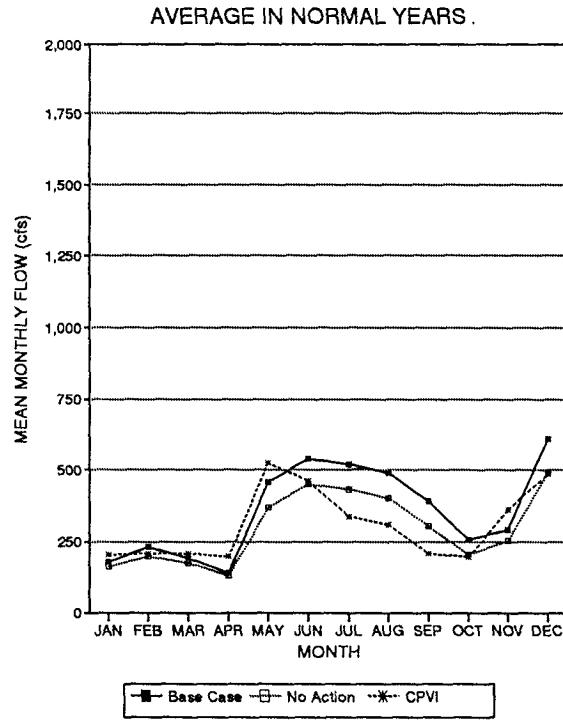
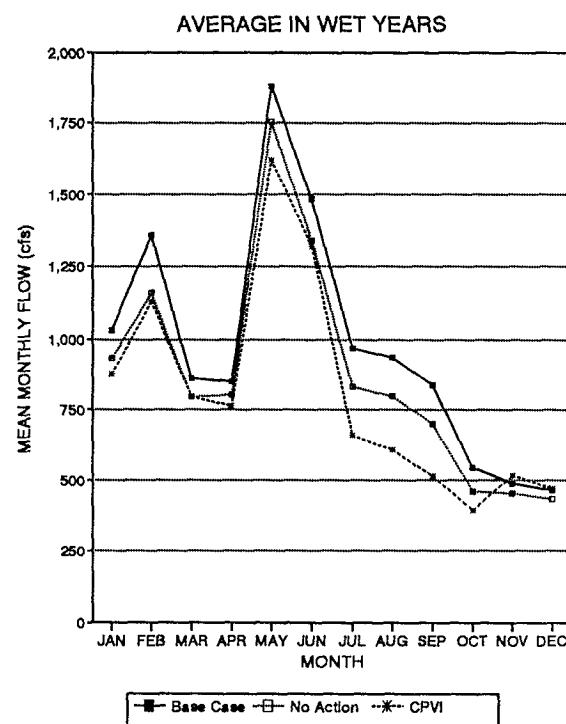
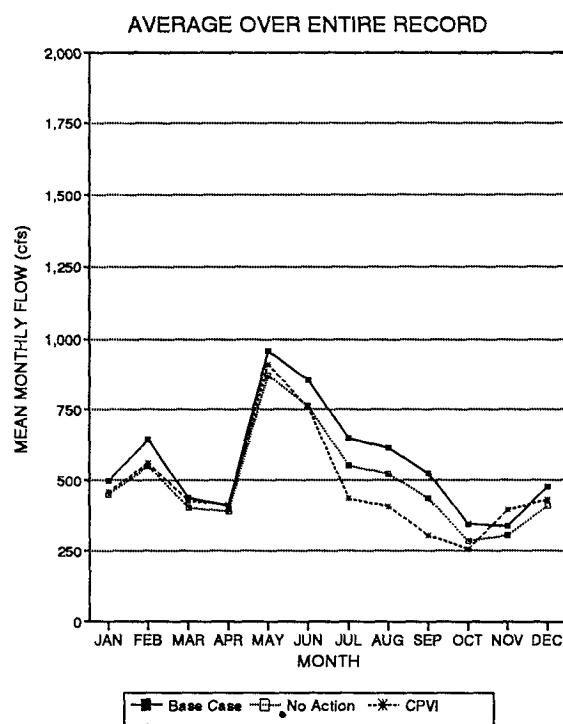
# FLOW AT VICTOR (BRUELLA ROAD)

## SIMULATION FROM 1921-1990 HYDROLOGY DATABASE



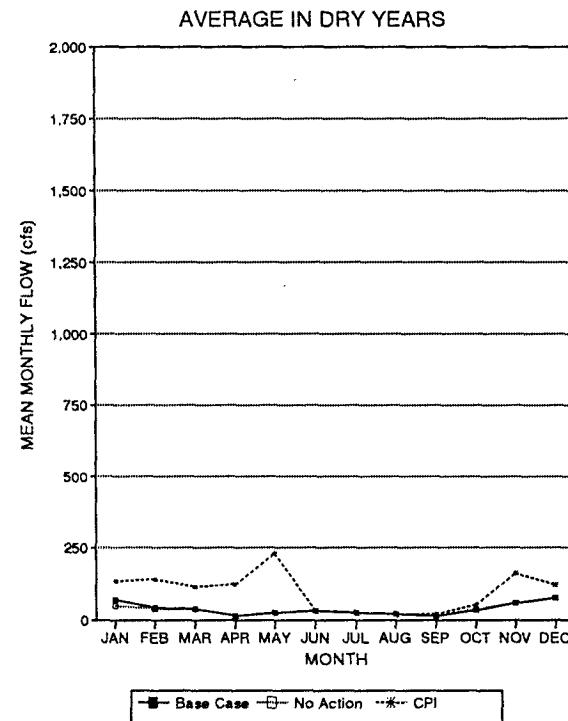
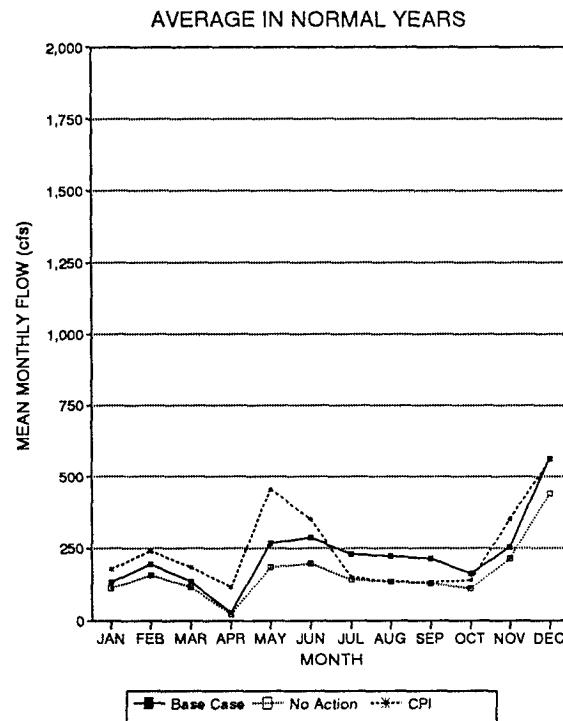
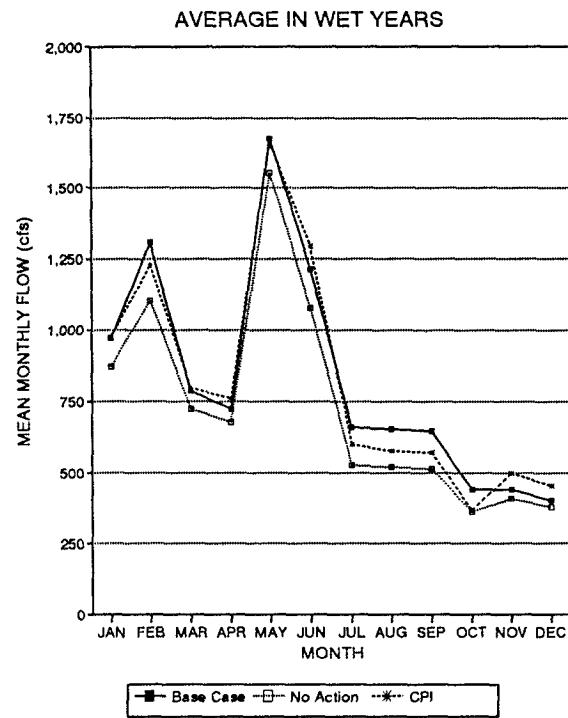
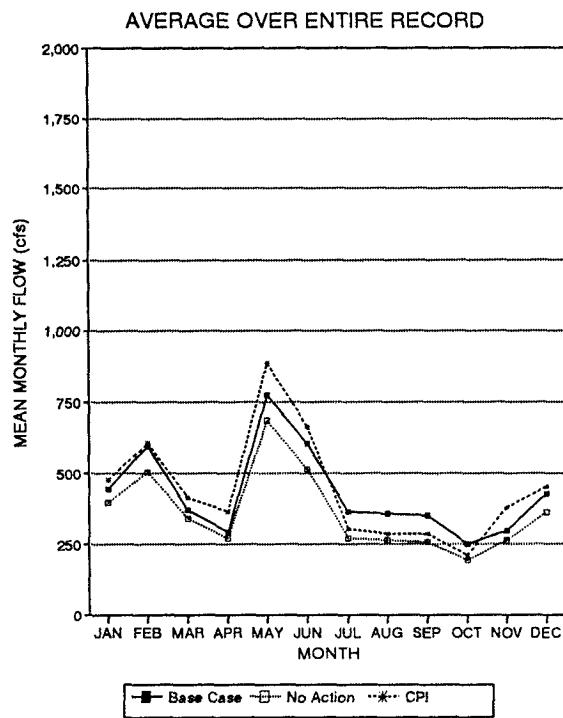
# FLOW AT VICTOR (BRUELLA ROAD)

## SIMULATION FROM 1921-1990 HYDROLOGY DATABASE



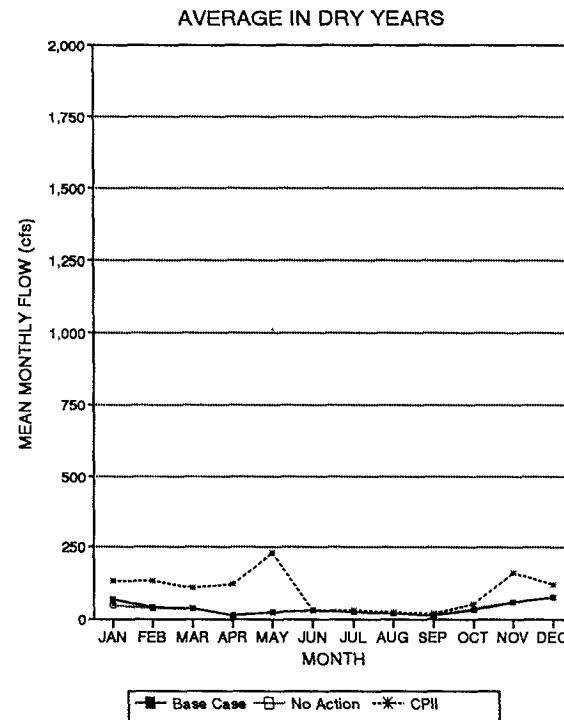
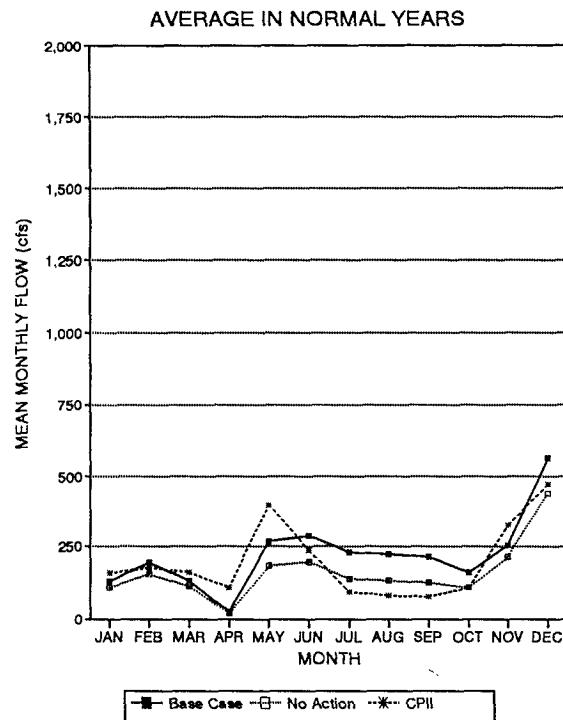
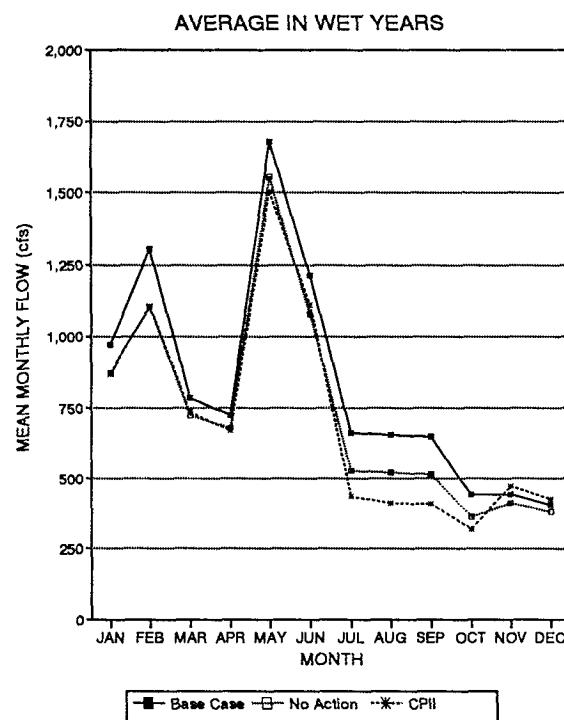
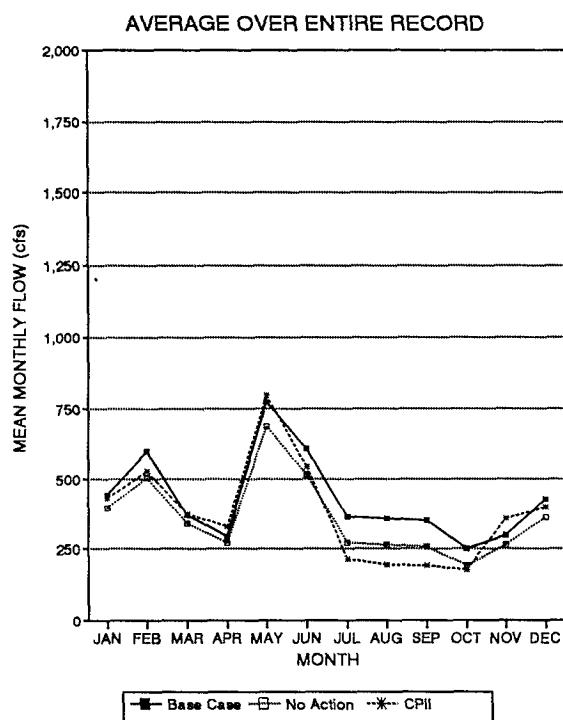
# FLOW BELOW LAKE LODI

## SIMULATION FROM 1921-1990 HYDROLOGY DATABASE



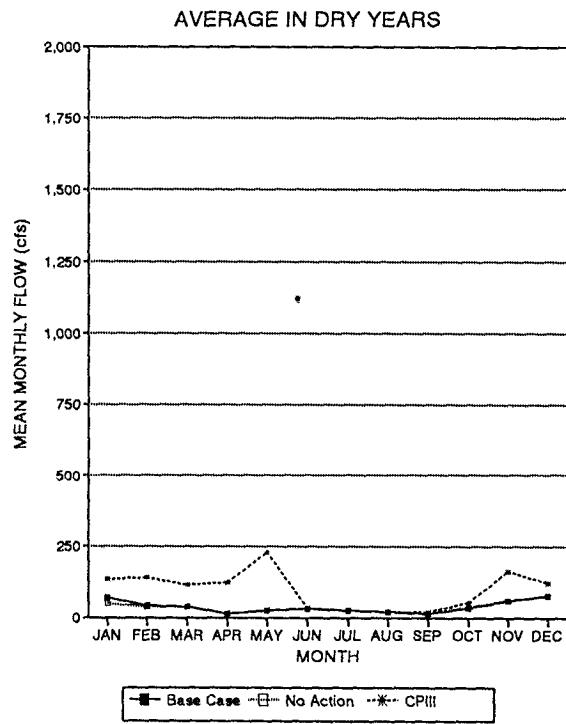
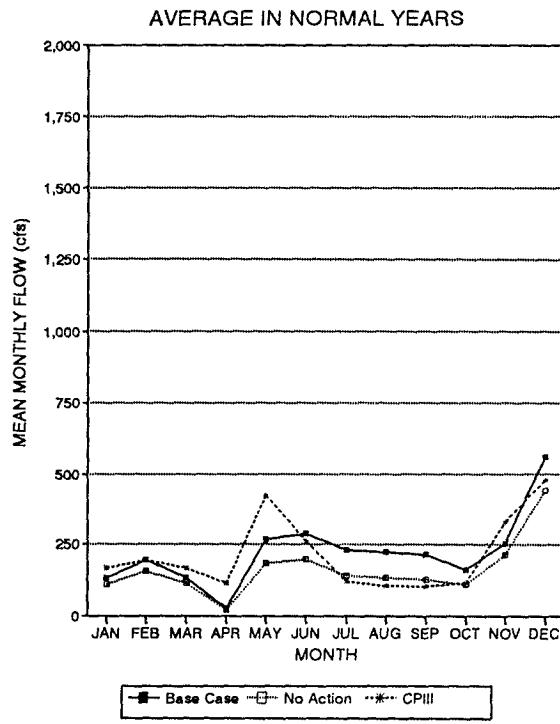
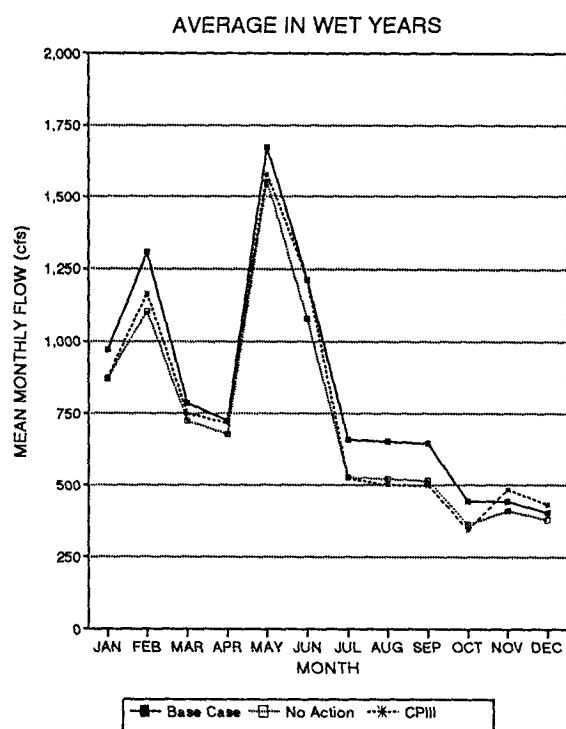
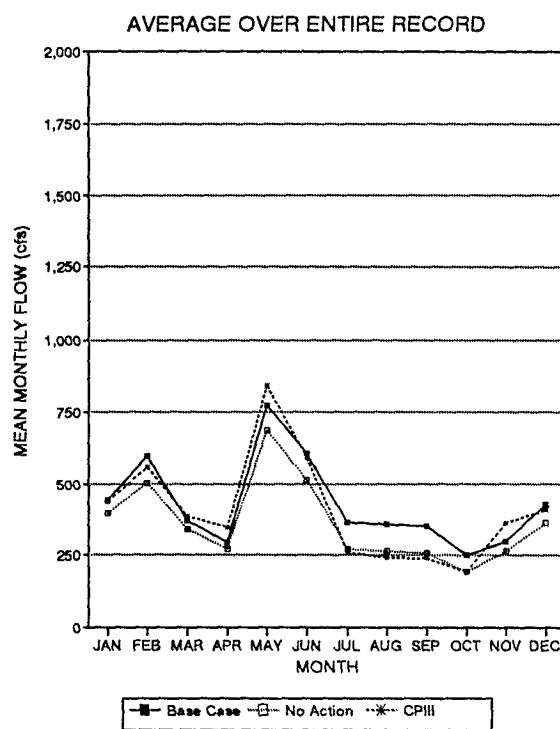
# FLOW BELOW LAKE LODI

## SIMULATION FROM 1921-1990 HYDROLOGY DATABASE



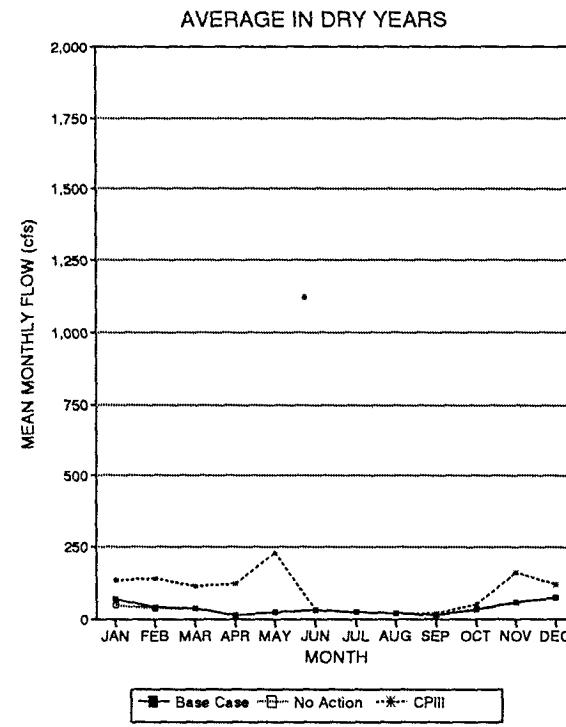
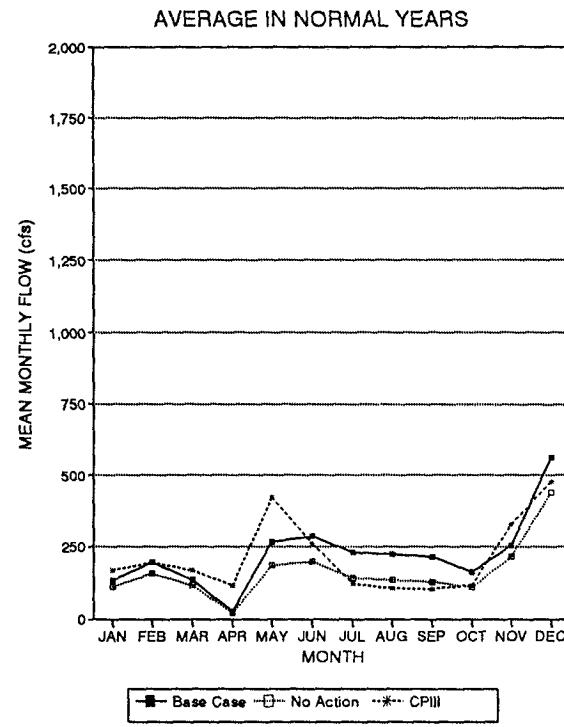
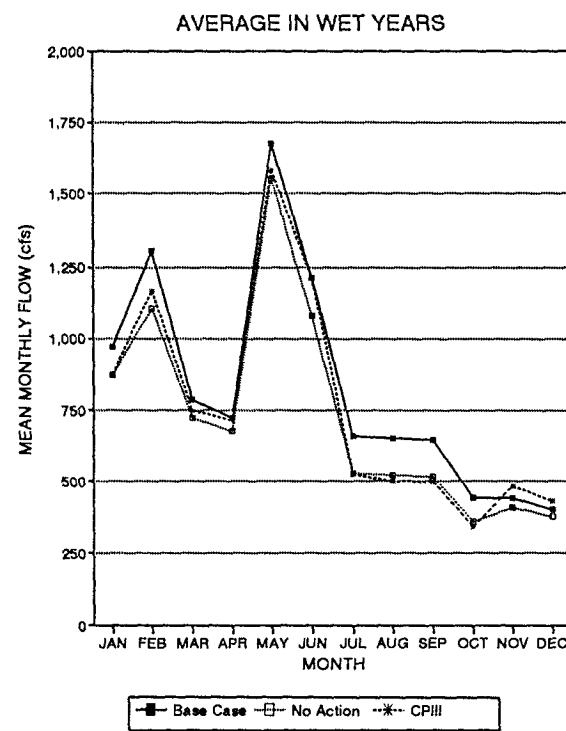
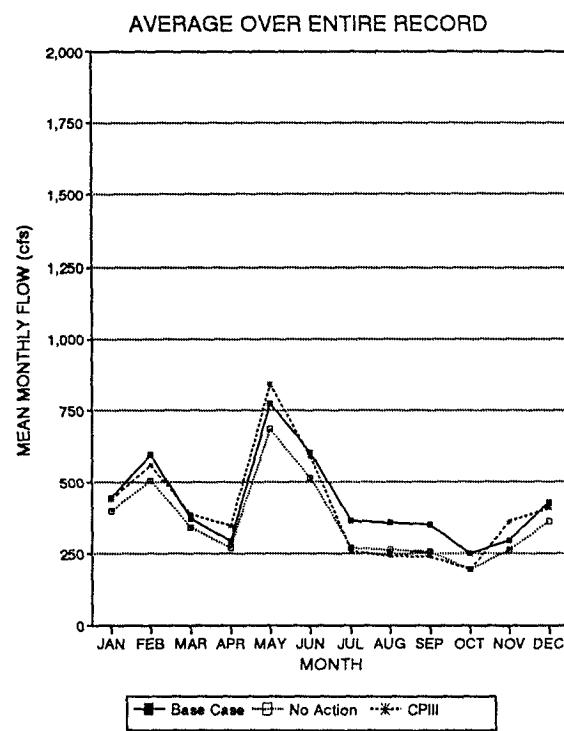
# FLOW BELOW LAKE LODI

## SIMULATION FROM 1921-1990 HYDROLOGY DATABASE



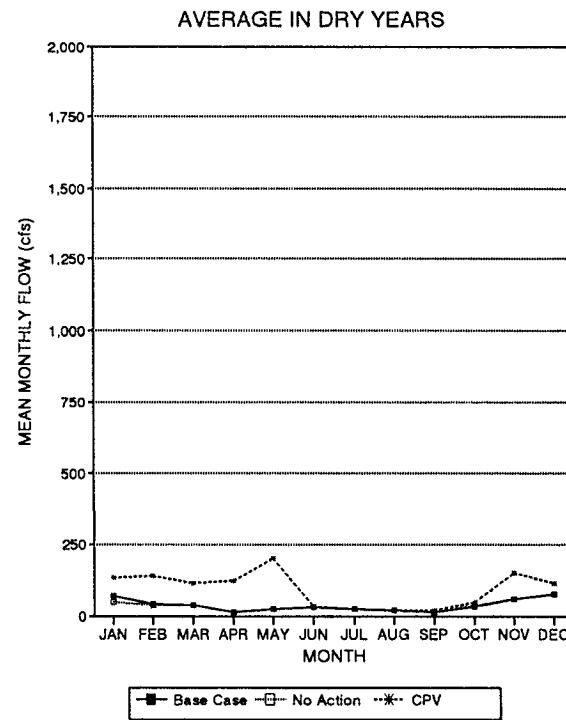
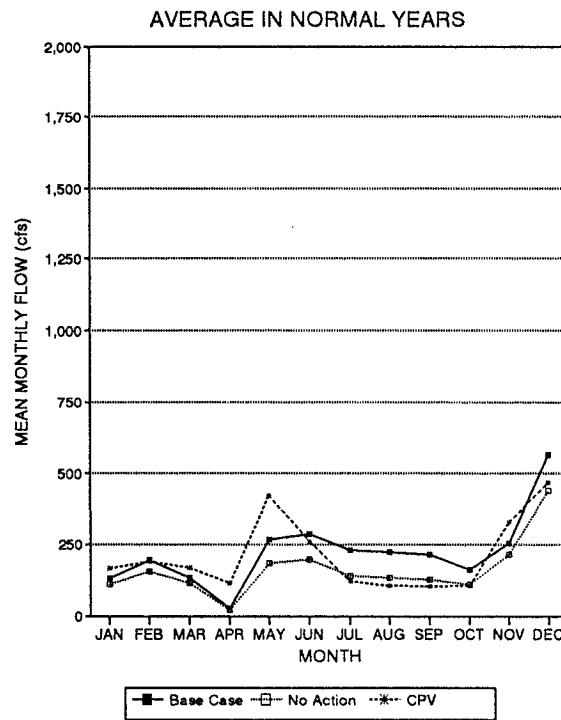
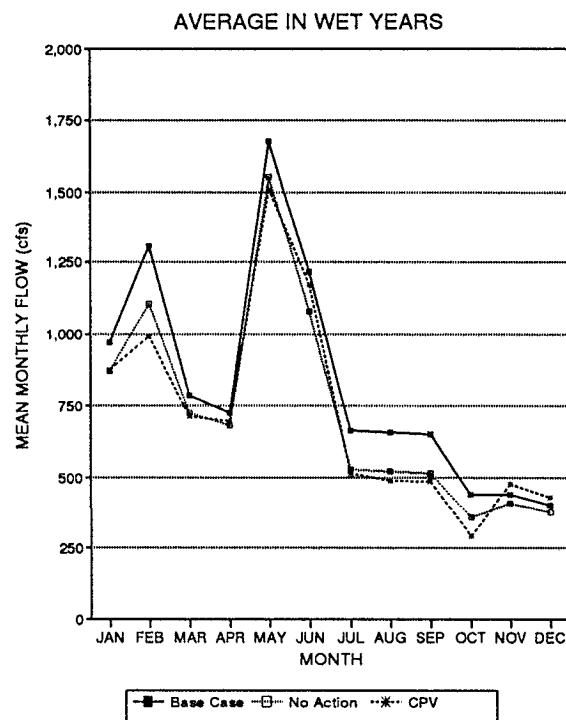
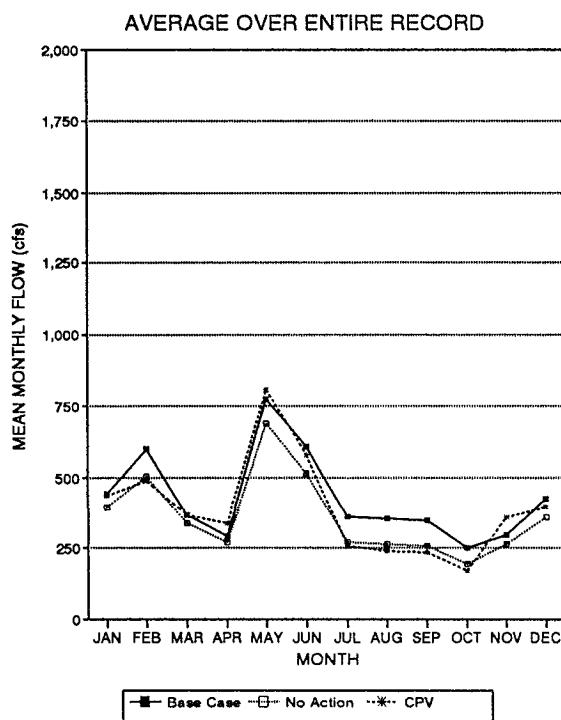
# FLOW BELOW LAKE LODI

## SIMULATION FROM 1921-1990 HYDROLOGY DATABASE



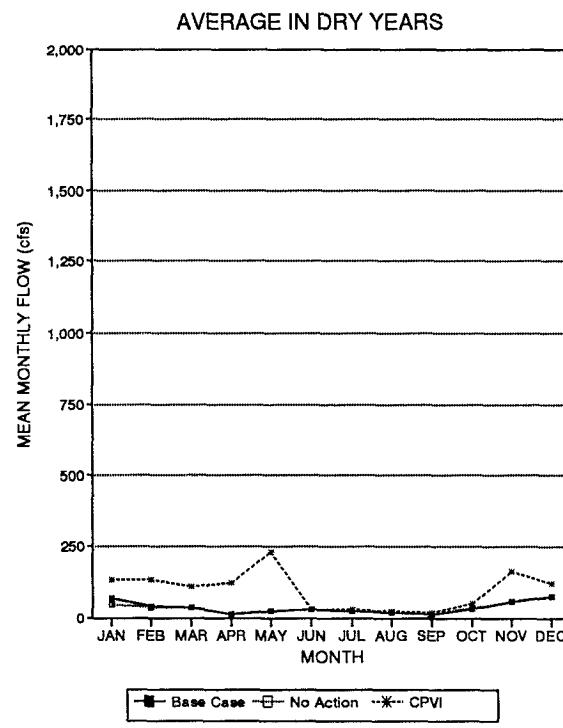
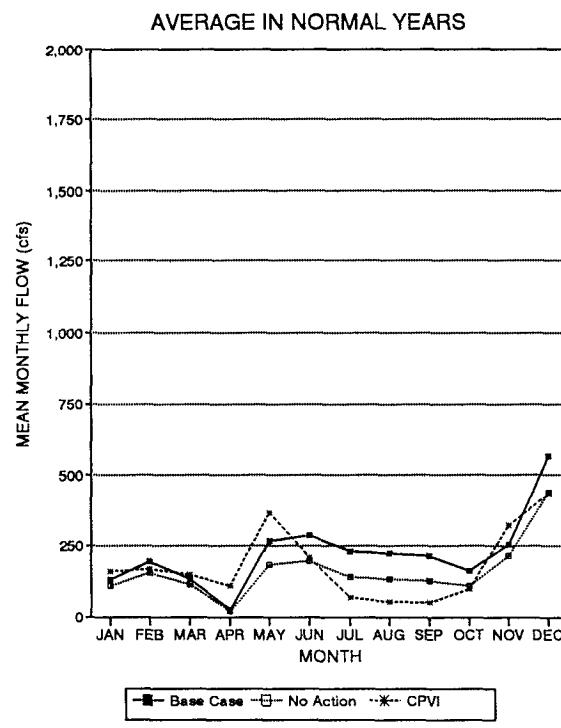
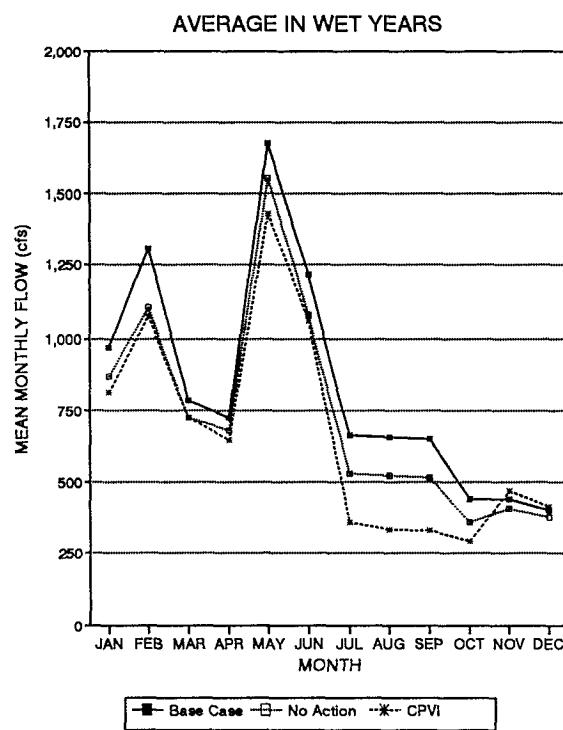
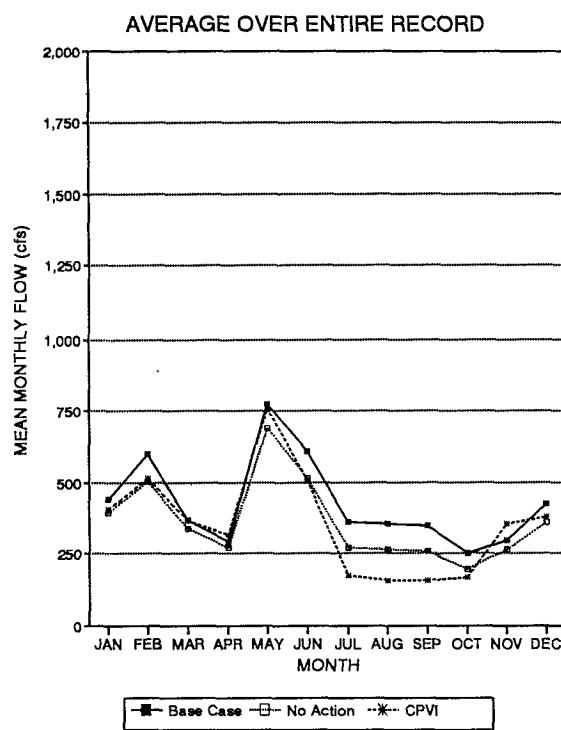
# FLOW BELOW LAKE LODI

## SIMULATION FROM 1921-1990 HYDROLOGY DATABASE



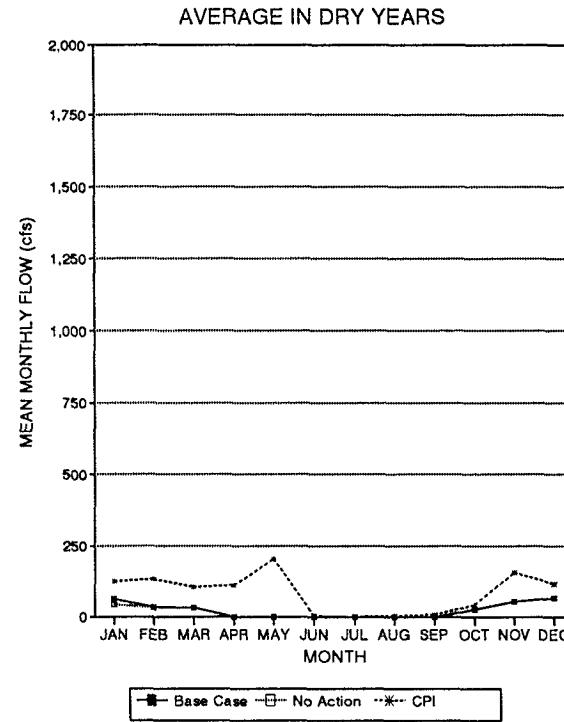
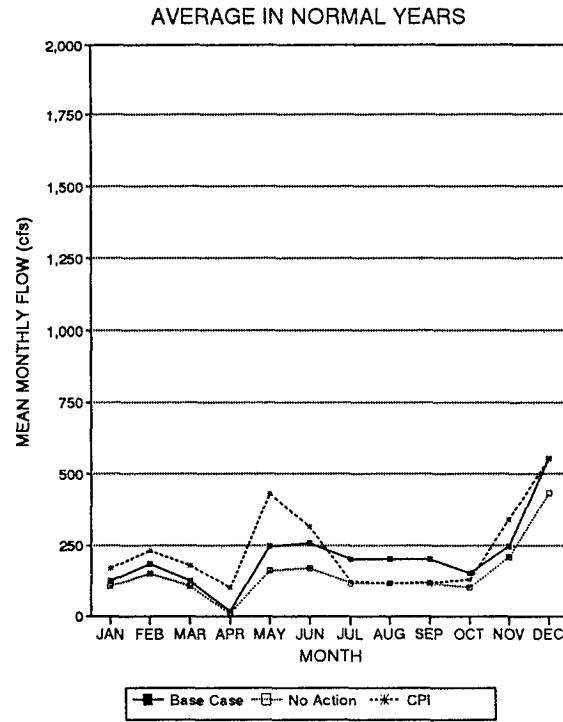
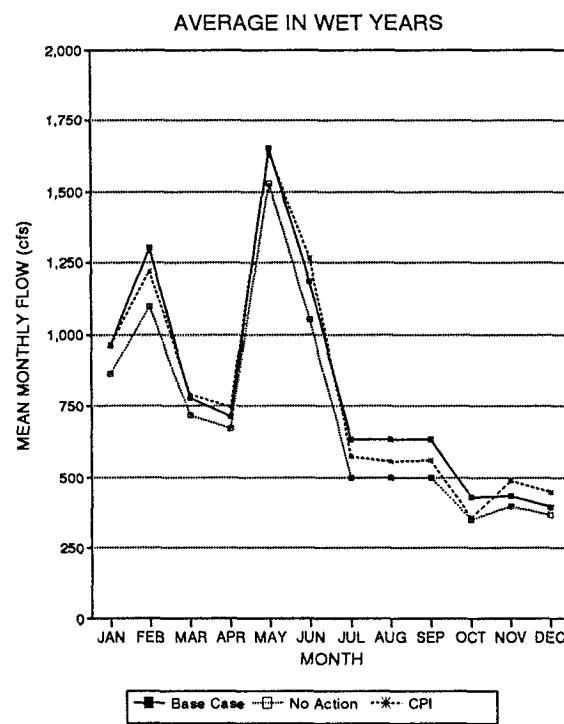
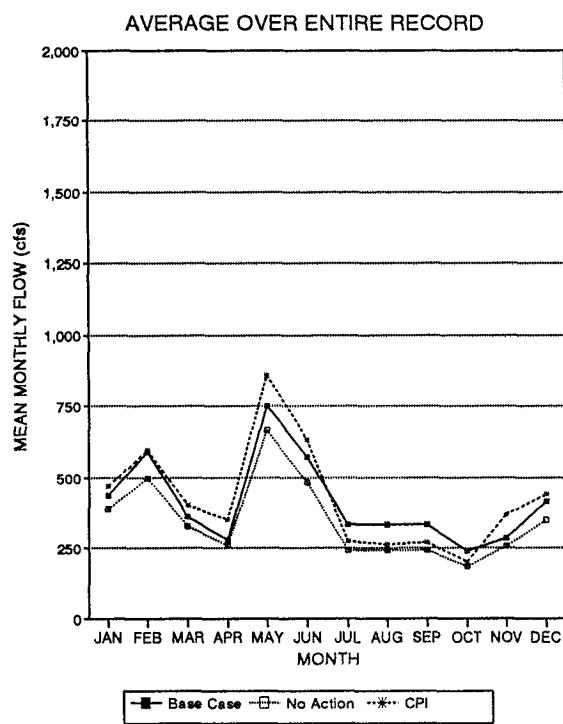
# FLOW BELOW LAKE LODI

## SIMULATION FROM 1921-1990 HYDROLOGY DATABASE



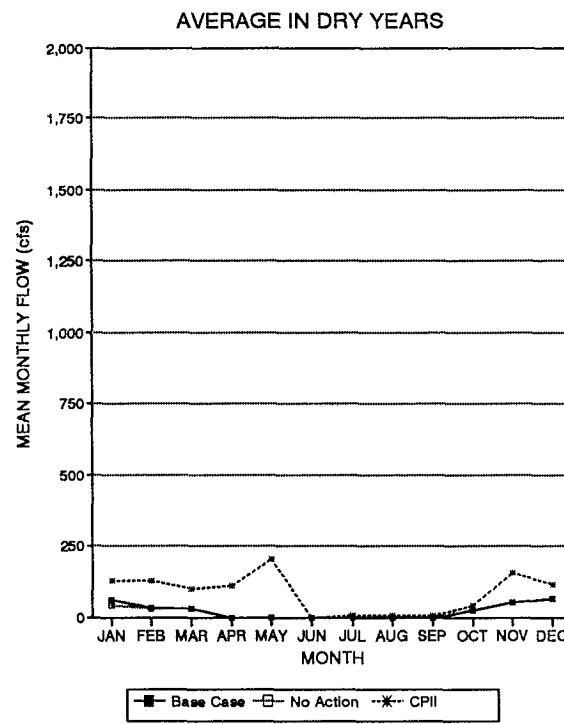
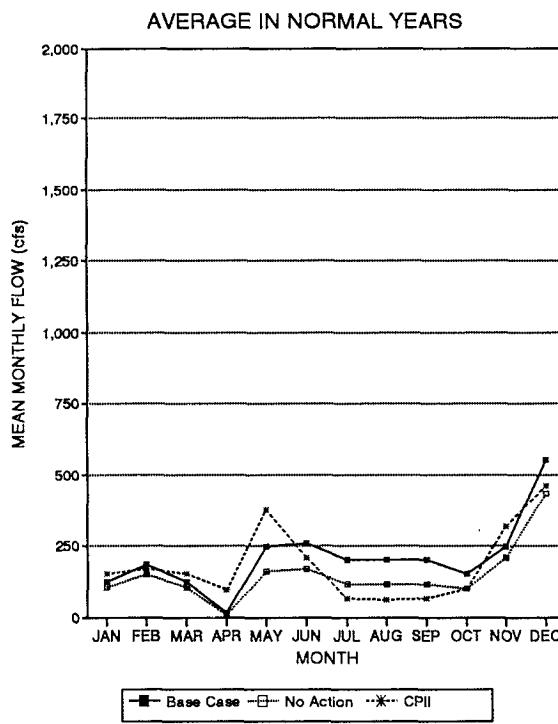
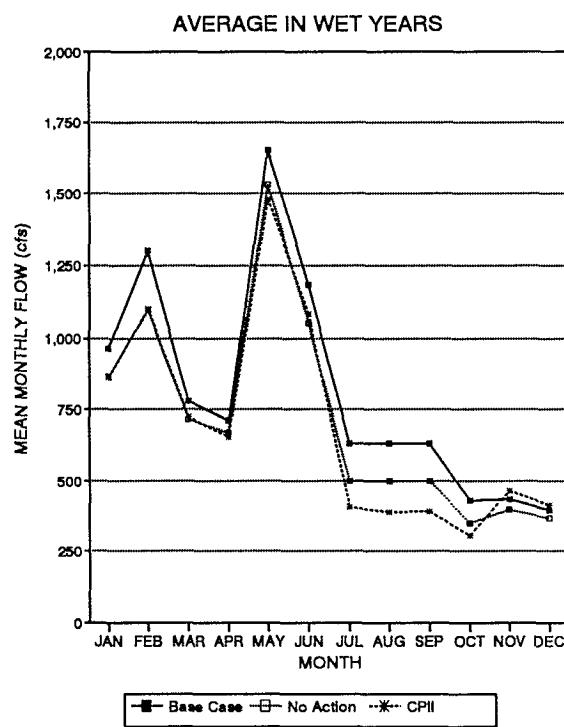
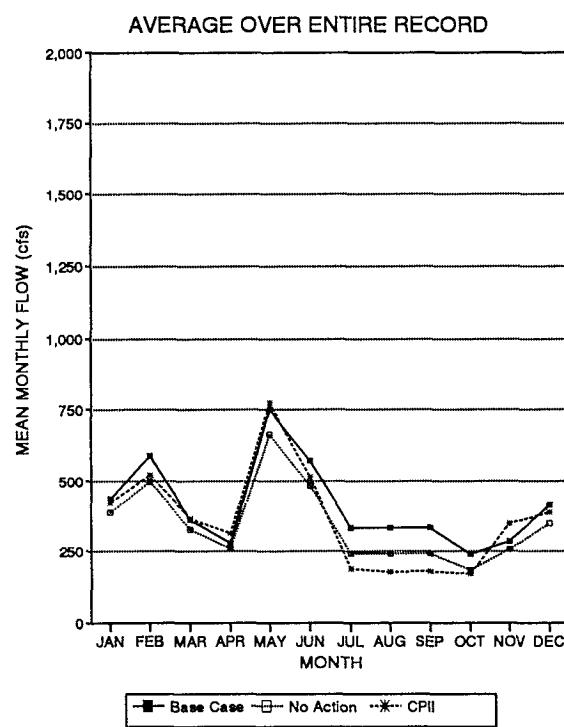
# FLOW INTO THE DELTA

## SIMULATION FROM 1921-1990 HYDROLOGY DATABASE



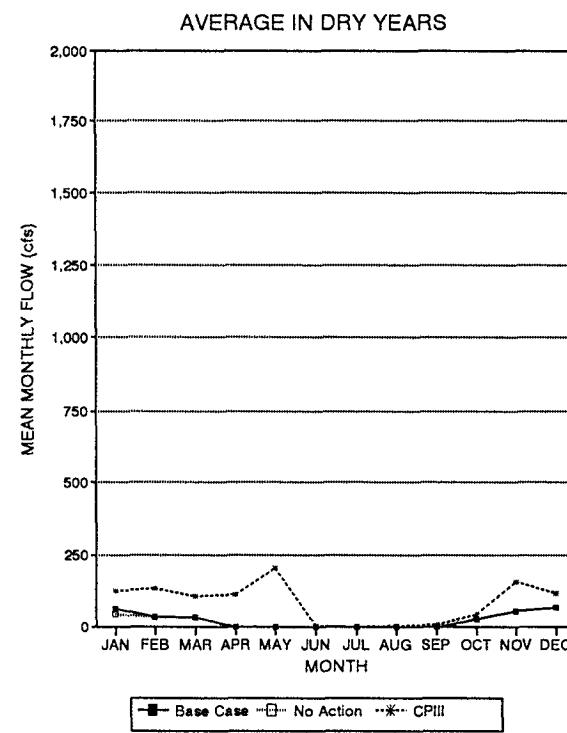
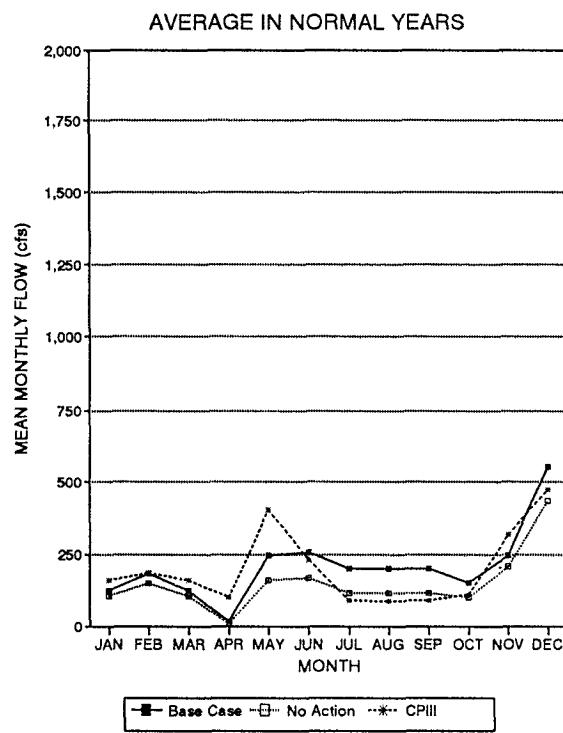
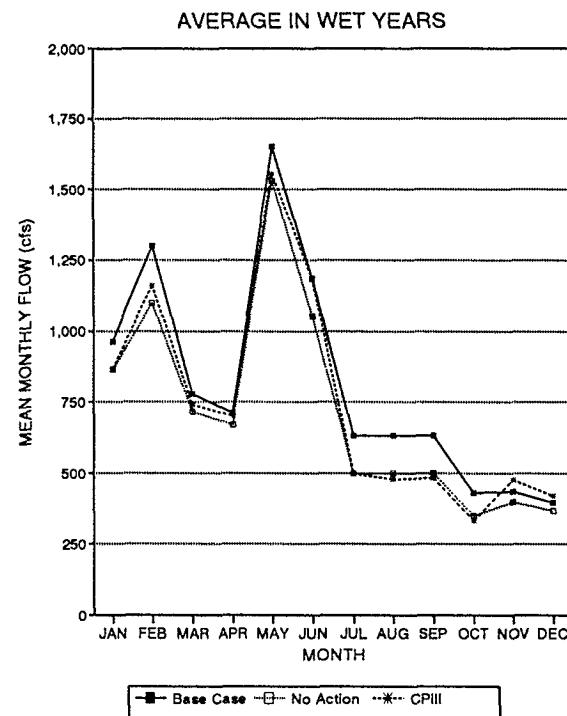
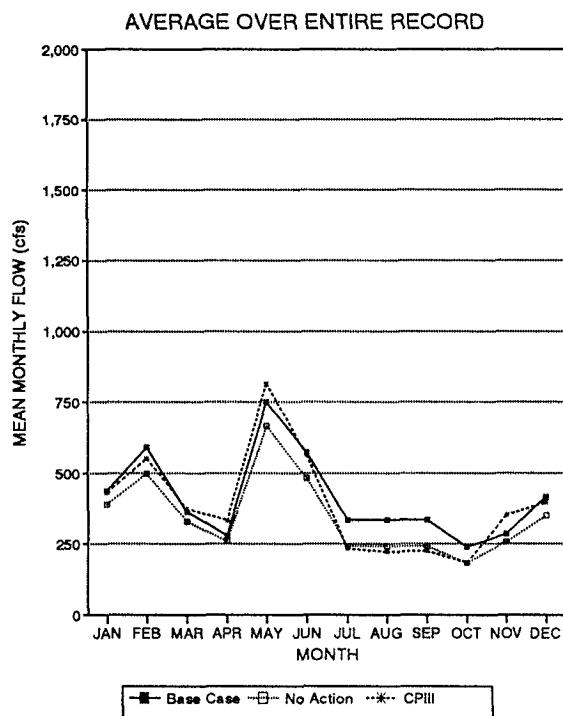
# FLOW INTO THE DELTA

## SIMULATION FROM 1921-1990 HYDROLOGY DATABASE



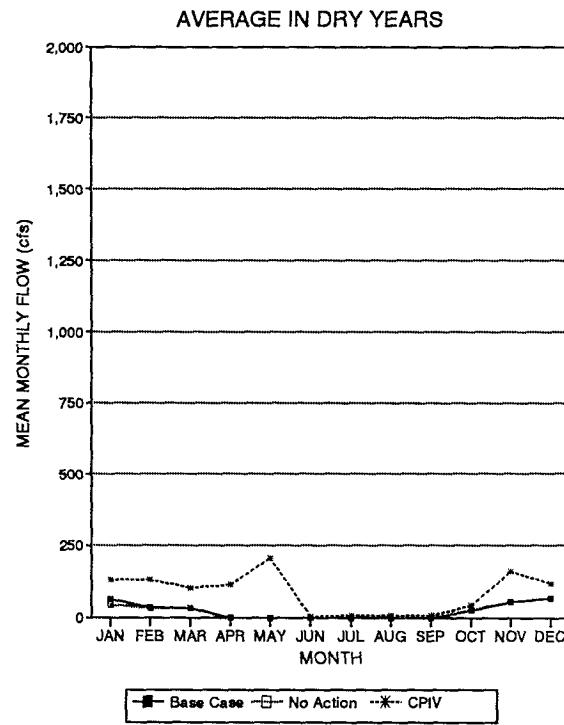
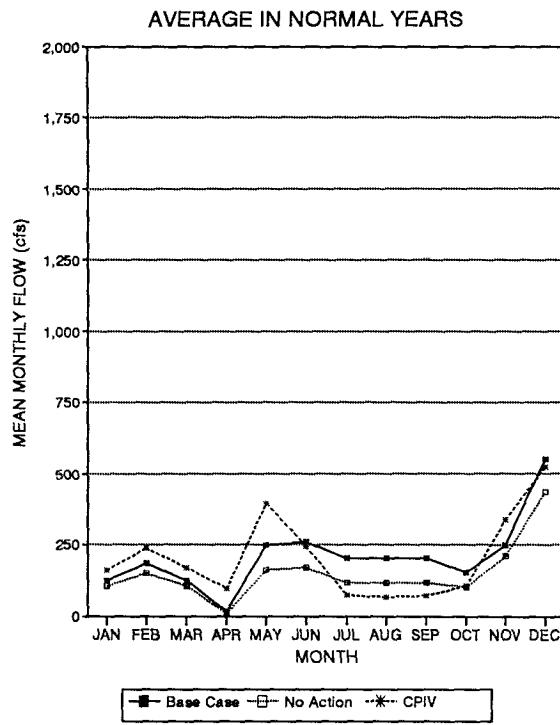
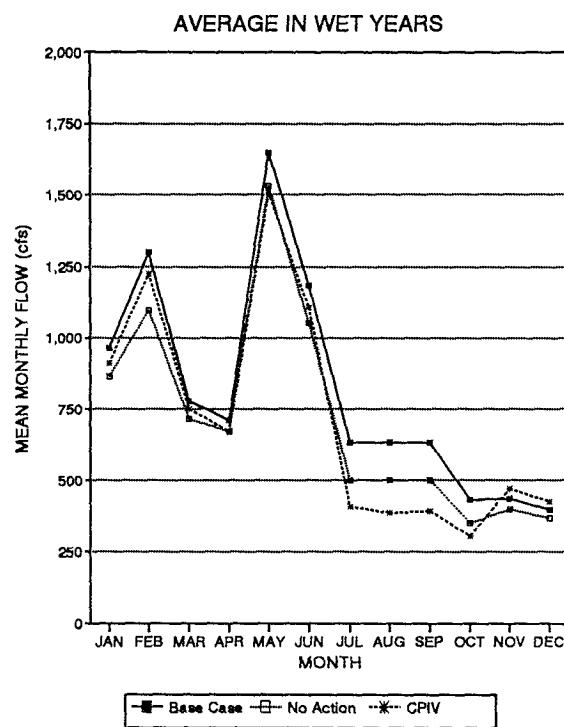
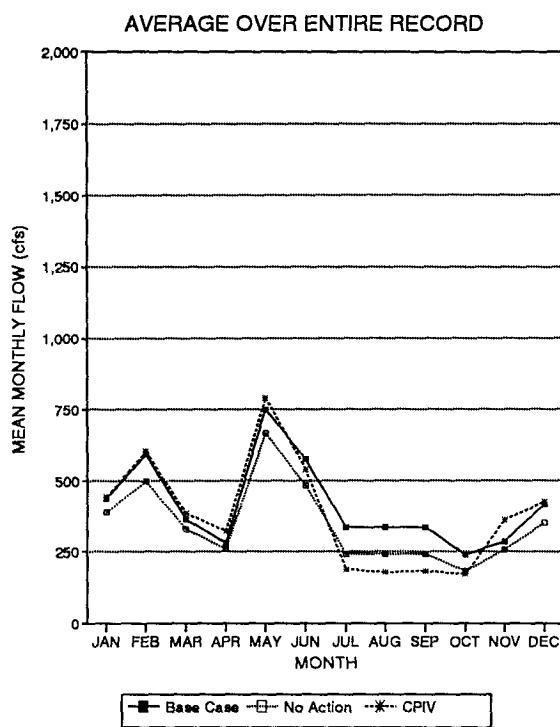
# FLOW INTO THE DELTA

## SIMULATION FROM 1921-1990 HYDROLOGY DATABASE



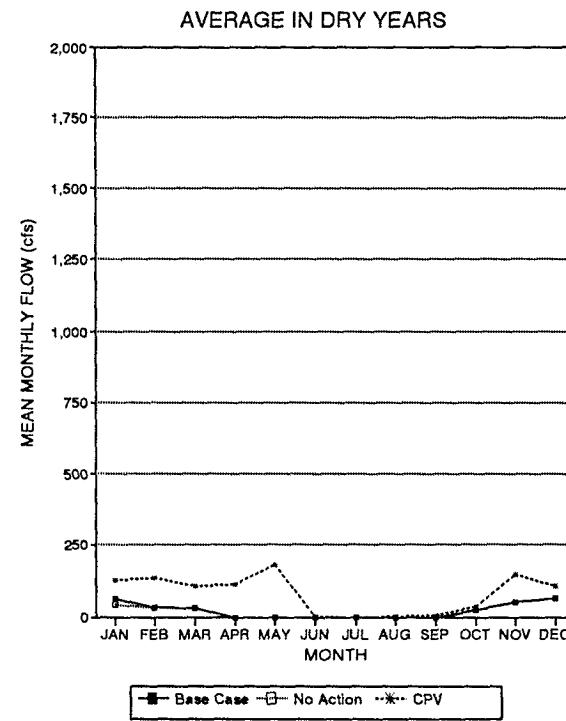
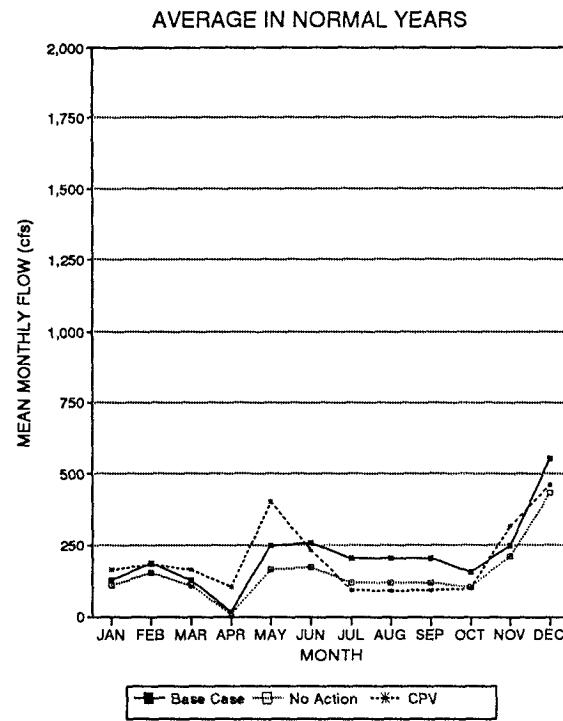
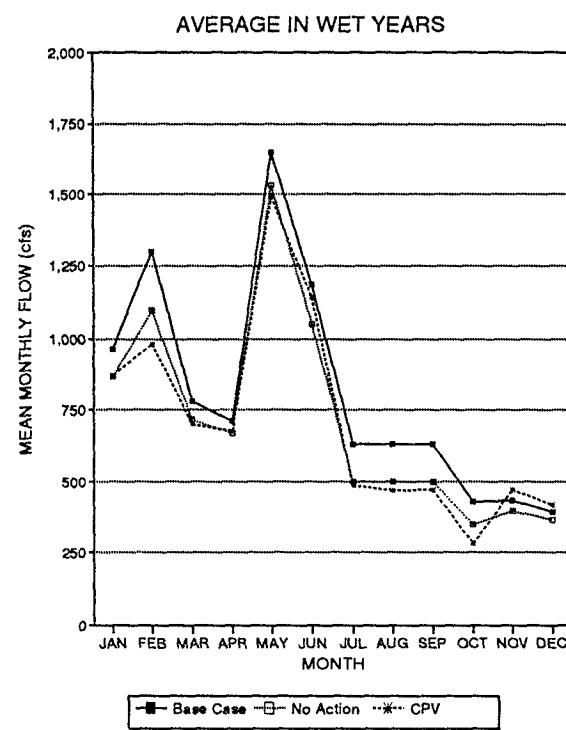
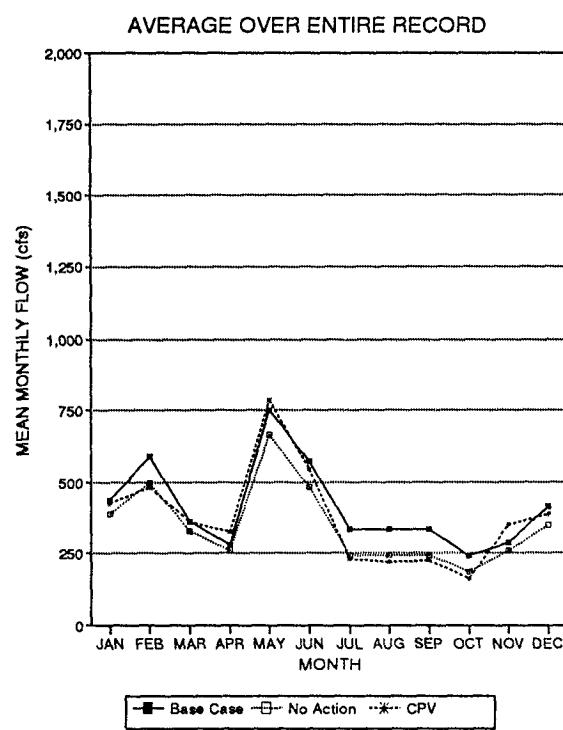
# FLOW INTO THE DELTA

## SIMULATION FROM 1921-1990 HYDROLOGY DATABASE



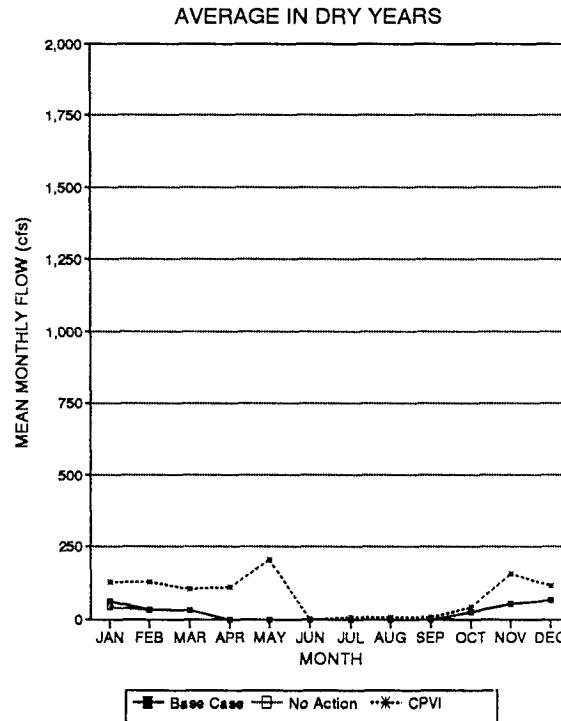
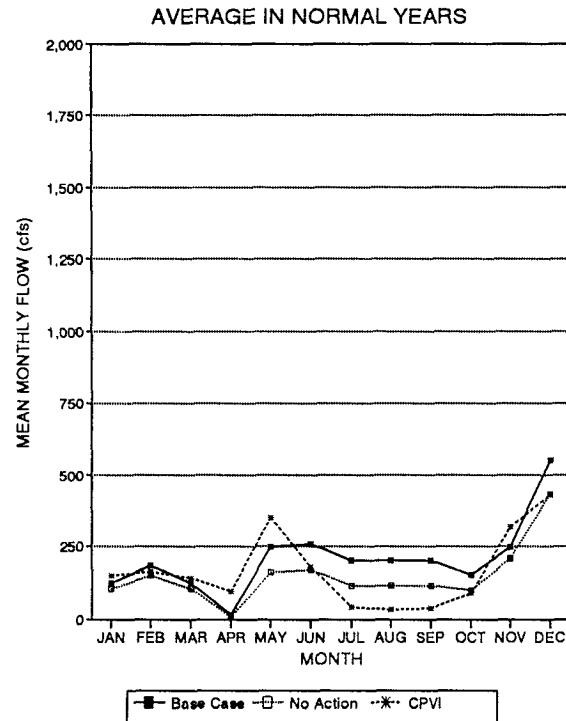
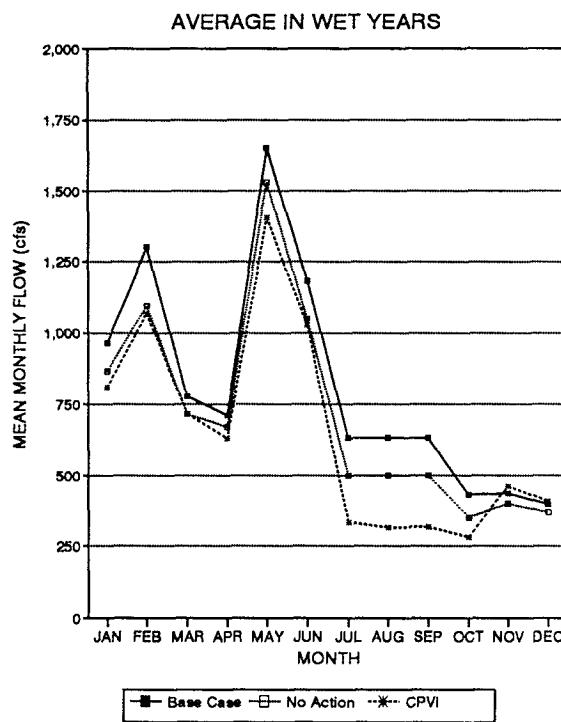
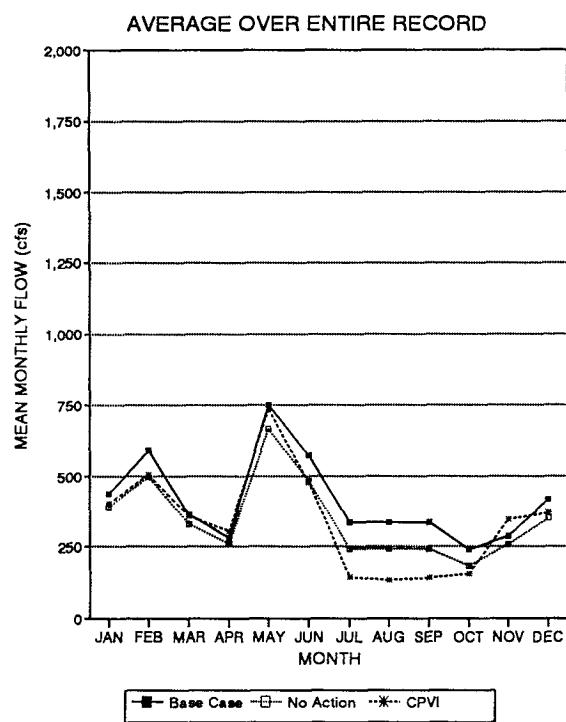
# FLOW INTO THE DELTA

## SIMULATION FROM 1921-1990 HYDROLOGY DATABASE



# FLOW INTO THE DELTA

## SIMULATION FROM 1921-1990 HYDROLOGY DATABASE



**Pardee Reservoir under Alternative Conditions**  
**Simulated Mean Monthly Storage (acre-feet)**  
**1921-1990 Hydrology Database**

ALTERNATIVE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
<b><u>AVERAGE IN DRY YEARS</u></b>												
1990 Existing Condition	181,716.9	176,211.0	178,571.0	180,872.2	181,540.2	178,667.7	176,043.4	172,246.0	170,276.9	170,502.6	166,671.1	160,117.4
2020 No Action	173,818.0	166,676.4	167,307.4	167,618.4	166,740.7	164,019.1	161,422.4	154,776.6	149,996.2	148,247.2	143,375.1	138,131.1
2020 Demand Side Management CPI	174,016.3	169,582.7	173,540.6	177,383.5	169,365.1	160,228.5	153,313.1	145,344.4	136,935.2	127,562.7	125,835.3	122,269.6
2020 Groundwater CPII	168,428.3	162,335.8	164,106.9	165,867.5	158,709.4	150,560.5	144,457.3	136,786.2	129,212.6	120,903.7	117,235.9	114,116.5
2020 Delta Supply CPIII	175,212.9	169,122.0	170,924.4	176,703.9	171,033.9	164,174.6	159,252.2	152,881.7	145,972.6	138,915.2	138,370.1	136,973.6
2020 Groundwater and FSC CPIV	163,895.5	156,634.8	157,124.2	157,355.4	153,184.2	147,898.1	144,808.9	139,199.9	133,912.4	128,780.8	123,710.8	118,453.0
2020 Raise Pardee CPV	291,051.6	285,343.9	287,354.7	288,897.1	273,288.1	259,189.9	245,287.2	229,040.6	212,988.3	196,526.6	192,729.8	188,789.5
2020 Groundwater Only CPVI	170,288.9	163,906.1	165,331.7	166,687.9	159,014.0	150,346.0	145,338.9	137,648.2	129,547.6	121,044.5	117,500.2	115,472.2
<b><u>AVERAGE IN NORMAL YEARS</u></b>												
1990 Existing Condition	183,802.4	186,418.3	194,624.8	201,060.5	206,609.5	207,022.0	194,737.6	191,742.9	193,572.7	199,668.9	203,101.1	186,949.8
2020 No Action	178,844.4	181,218.8	189,657.8	197,964.1	205,334.2	206,679.5	193,842.9	187,458.3	186,065.5	190,399.7	194,409.2	186,096.6
2020 Demand Side Management CPI	177,118.2	180,330.9	189,418.0	198,889.5	204,892.0	205,930.5	192,913.9	187,113.4	182,746.4	181,621.7	190,176.7	185,784.3
2020 Groundwater CPII	173,242.8	176,172.8	185,581.0	197,061.8	203,797.7	204,109.7	191,340.0	181,275.5	172,070.7	167,205.1	178,106.9	183,600.7
2020 Delta Supply CPIII	176,720.5	179,416.7	188,231.5	198,171.4	204,192.9	204,616.7	191,987.8	183,336.6	175,741.8	172,031.2	181,680.5	184,963.8
2020 Groundwater and FSC CPIV	171,063.1	173,855.5	183,717.2	194,271.4	202,098.6	202,941.5	190,218.2	178,829.2	168,298.6	161,984.1	173,406.0	181,442.8
2020 Raise Pardee CPV	303,370.2	306,421.5	317,662.4	331,525.1	339,355.8	344,646.9	330,184.1	318,702.3	308,585.1	302,701.8	312,447.9	318,613.4
2020 Groundwater Only CPVI	173,408.3	177,615.0	186,888.8	197,422.5	204,165.2	204,629.1	191,827.8	182,690.3	174,536.3	170,670.7	180,855.7	184,310.5
<b><u>AVERAGE IN WET YEARS</u></b>												
1990 Existing Condition	198,444.8	199,944.1	197,149.8	197,094.0	203,425.1	203,188.6	196,371.0	194,215.5	196,188.8	199,574.5	199,890.4	180,584.7
2020 No Action	194,659.3	197,507.9	195,270.2	195,224.4	202,690.5	203,166.3	196,222.9	191,551.0	191,652.8	194,711.4	196,036.7	180,584.7
2020 Demand Side Management CPI	195,560.0	198,499.4	197,015.4	197,420.7	204,034.4	203,710.7	196,763.1	193,669.3	191,169.4	190,994.5	194,692.2	180,502.9
2020 Groundwater CPII	193,542.7	196,840.2	195,634.4	195,814.7	203,306.4	203,328.3	196,081.2	186,236.0	175,735.9	168,389.3	177,628.8	179,113.6
2020 Delta Supply CPIII	196,201.9	199,112.1	196,655.8	196,760.3	203,950.1	203,638.9	196,415.7	190,433.3	184,645.2	181,911.5	187,336.7	179,455.0
2020 Groundwater and FSC CPIV	193,210.6	196,978.7	195,552.7	195,565.6	203,491.7	203,505.6	195,508.7	181,682.0	167,361.2	156,630.3	168,223.0	176,488.3
2020 Raise Pardee CPV	333,537.6	341,872.4	342,279.1	343,854.8	349,448.2	348,318.3	340,660.2	333,656.9	326,761.6	323,177.5	328,508.9	324,075.9
2020 Groundwater Only CPVI	194,067.6	197,300.8	195,987.4	195,875.5	203,304.1	203,327.2	195,911.8	186,024.7	175,485.7	168,118.5	177,270.2	178,487.6

C-1101590

**Pardee Reservoir Elevation  
1921-1990 Hydrology Database**

ALTERNATIVE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
<b><u>AVERAGE IN DRY YEARS</u></b>												
1990 Existing Condition	553.9	551.0	551.8	552.8	553.2	551.9	550.7	548.8	547.7	547.6	545.5	541.9
2020 No Action	548.9	544.5	543.8	543.4	543.0	541.3	539.6	535.8	532.9	530.4	527.1	524.0
2020 Demand Side Management CPI	549.0	546.2	547.4	549.2	545.5	541.0	537.5	533.1	528.2	522.0	520.5	517.8
2020 Groundwater CPII	545.8	541.8	541.6	542.1	538.6	534.3	530.9	526.4	521.8	515.5	511.8	509.1
2020 Delta Supply CPIII	550.4	547.0	547.4	550.3	547.8	544.5	542.0	538.7	534.8	530.6	530.0	528.6
2020 Groundwater and FSC CPIV	546.8	542.6	542.3	542.5	538.8	534.2	531.4	526.8	522.0	515.8	512.1	509.9
2020 Raise Pardee CPV	600.1	597.5	598.1	598.7	592.4	586.6	580.8	573.8	566.4	558.1	555.9	553.6
2020 Groundwater Only CPVI	544.0	539.5	538.8	538.7	536.7	534.1	532.5	529.4	526.4	522.9	519.0	513.8
<b><u>AVERAGE IN NORMAL YEARS</u></b>												
1990 Existing Condition	553.3	555.2	559.9	563.3	566.1	566.3	560.7	559.3	560.1	563.0	564.6	557.0
2020 No Action	550.7	552.4	557.4	561.7	565.5	566.2	560.3	557.2	556.5	558.6	560.5	556.6
2020 Demand Side Management CPI	549.3	551.5	557.0	562.2	565.3	565.8	559.8	557.0	554.8	554.1	558.4	556.4
2020 Groundwater CPII	547.4	549.5	555.1	561.3	564.8	565.0	559.1	554.2	549.5	546.9	552.5	555.3
2020 Delta Supply CPIII	549.5	551.5	556.7	561.8	565.0	565.2	559.4	555.2	551.4	549.3	554.3	556.0
2020 Groundwater and FSC CPIV	547.5	550.3	556.0	561.5	565.0	565.2	559.3	554.9	550.8	548.6	553.9	555.7
2020 Raise Pardee CPV	601.7	604.0	610.2	616.6	620.0	622.1	616.0	611.3	607.1	604.6	608.6	611.3
2020 Groundwater Only CPVI	546.6	548.5	554.4	559.9	564.0	564.4	558.5	552.9	547.5	544.1	550.1	554.2
<b><u>AVERAGE IN WET YEARS</u></b>												
1990 Existing Condition	561.4	561.8	560.4	560.0	562.9	562.2	559.0	557.6	558.8	560.4	560.2	551.0
2020 No Action	557.4	559.0	558.4	558.4	562.4	562.4	559.1	556.5	556.8	558.2	558.5	551.0
2020 Demand Side Management CPI	559.0	560.6	560.0	560.3	563.6	563.2	559.9	558.0	556.8	556.7	557.8	551.0
2020 Groundwater CPII	556.7	558.4	558.6	558.8	563.0	562.6	559.1	554.1	549.3	545.5	549.6	550.2
2020 Delta Supply CPIII	559.8	561.2	560.1	560.1	563.8	563.1	559.7	556.4	553.7	552.2	554.3	550.4
2020 Groundwater and FSC CPIV	557.0	558.7	558.7	558.8	563.0	562.6	559.0	554.0	549.2	545.3	549.4	549.9
2020 Raise Pardee CPV	616.5	620.1	620.5	621.0	623.2	622.0	618.3	614.9	612.1	610.7	612.3	610.1
2020 Groundwater Only CPVI	556.6	559.1	559.1	559.2	563.5	563.0	558.8	551.9	545.1	539.3	544.8	548.9

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**Pardee Releases under Alternative Conditions****Simulated Mean Monthly Flow (cfs)****1921-1990 Hydrology Database**

ALTERNATIVE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
<b>AVERAGE IN DRY YEARS</b>												
1990 Existing Condition	34.0	17.5	10.7	13.6	39.2	130.7	127.0	106.5	73.5	26.7	24.5	65.0
2020 No Action	23.5	9.5	3.7	2.8	22.1	78.5	76.7	103.9	79.8	16.9	9.3	24.9
2020 Demand Side Management CPI	50.2	22.3	15.7	15.5	216.4	274.2	239.3	216.4	223.5	216.4	13.9	38.9
2020 Groundwater CPII	24.5	11.1	7.1	2.5	149.1	198.1	164.3	150.8	154.1	149.1	2.3	4.9
2020 Delta Supply CPIII	28.2	11.3	6.8	14.8	204.9	256.1	224.3	208.7	222.3	204.9	15.3	27.5
2020 Groundwater and FSC CPIV	34.3	10.5	6.5	2.5	145.0	192.9	193.3	157.1	150.0	145.0	14.5	2.1
2020 Raise Pardee CPV	13.1	2.5	0.0	0.0	275.1	284.5	275.1	275.1	284.5	275.1	0.0	0.0
2020 Groundwater Only CPVI	16.6	7.9	1.9	0.0	117.1	164.1	126.0	128.5	132.0	117.1	0.0	0.0
<b>AVERAGE IN NORMAL YEARS</b>												
1990 Existing Condition	173.6	253.3	375.1	571.2	816.7	1,045.4	436.3	241.9	155.3	140.1	291.9	865.7
2020 No Action	152.4	205.6	323.5	484.0	718.3	948.6	358.3	203.6	135.5	107.1	223.5	682.3
2020 Demand Side Management CPI	180.8	259.7	387.6	546.1	837.8	1,063.0	475.1	310.3	296.5	286.5	224.0	691.3
2020 Groundwater CPII	155.7	218.9	333.2	458.5	761.8	1,003.3	396.1	301.8	302.8	290.8	134.0	482.6
2020 Delta Supply CPIII	162.3	223.5	343.1	510.8	798.0	1,022.3	412.6	297.4	293.4	284.1	172.5	536.1
2020 Groundwater and FSC CPIV	194.8	247.7	365.7	542.8	761.4	1,007.4	452.6	347.0	305.0	293.2	164.9	565.5
2020 Raise Pardee CPV	147.3	219.6	305.4	417.6	740.1	913.8	415.7	317.0	314.7	304.9	154.3	474.3
2020 Groundwater Only CPVI	144.0	197.0	299.5	445.4	722.0	968.4	367.6	296.4	301.1	289.7	92.8	410.4
<b>AVERAGE IN WET YEARS</b>												
1990 Existing Condition	903.2	1,320.6	1,378.9	1,449.8	2,516.3	2,502.3	717.6	310.4	209.3	228.6	388.0	853.4
2020 No Action	860.6	1,255.6	1,331.1	1,400.4	2,434.6	2,413.3	634.1	265.3	170.6	174.8	311.2	734.6
2020 Demand Side Management CPI	918.3	1,323.8	1,394.4	1,475.3	2,547.6	2,534.0	749.0	351.9	316.1	312.6	346.3	785.7
2020 Groundwater CPII	872.7	1,266.6	1,337.8	1,420.2	2,464.5	2,443.9	673.4	388.1	384.3	374.1	204.1	482.4
2020 Delta Supply CPIII	878.9	1,278.9	1,361.1	1,426.7	2,473.8	2,455.5	678.4	325.1	304.4	298.9	268.2	636.5
2020 Groundwater and FSC CPIV	902.6	1,285.5	1,353.7	1,456.6	2,465.6	2,443.9	675.8	388.5	384.6	374.4	236.7	524.4
2020 Raise Pardee CPV	796.6	1,183.6	1,315.7	1,395.8	2,490.2	2,454.8	673.4	332.7	316.6	309.6	269.9	582.6
2020 Groundwater Only CPVI	841.9	1,239.1	1,317.9	1,394.0	2,422.7	2,408.5	641.7	413.4	414.7	401.5	140.3	347.0

C-1101592

**Camanche Reservoir under Alternative Conditions**
**Simulated Mean Monthly Storage (acre-feet)**
**1921-1990 Hydrology Database**

ALTERNATIVE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
<b>AVERAGE IN DRY YEARS</b>												
1990 Existing Condition	249,790.7	246,103.9	239,431.2	229,598.8	215,241.4	202,344.3	188,288.1	176,106.2	167,609.6	160,808.0	154,965.2	150,584.8
2020 No Action	215,071.6	211,039.5	203,833.5	192,912.2	177,236.6	161,236.2	144,480.6	132,574.8	124,812.2	117,634.3	110,961.4	104,059.6
2020 Demand Side Management CPI	229,556.3	220,455.6	209,304.9	192,532.8	176,096.5	171,564.6	164,552.1	159,070.6	159,130.4	163,007.7	150,282.0	141,387.5
2020 Groundwater CPII	224,336.3	219,516.3	209,477.3	196,054.5	183,570.2	174,586.6	169,199.5	163,097.6	163,997.5	163,811.0	150,588.6	140,204.2
2020 Delta Supply CPIII	220,266.3	210,531.8	198,840.5	182,072.7	165,006.2	159,509.0	151,755.5	145,979.8	146,091.8	149,343.3	136,727.7	127,124.3
2020 Groundwater and FSC CPIV	234,563.1	229,729.9	219,648.5	205,816.6	191,566.7	182,171.4	177,286.1	170,832.2	170,507.2	170,043.6	157,496.1	146,866.7
2020 Raise Pardee CPV	195,900.6	185,586.5	173,525.6	155,983.1	145,238.1	141,659.1	137,261.2	135,735.9	139,617.6	147,493.7	134,504.0	123,639.8
2020 Groundwater Only CPVI	230,976.6	226,843.7	220,674.2	207,056.2	192,508.3	181,447.1	173,656.6	166,156.6	165,731.0	163,495.5	150,137.2	142,488.3
<b>AVERAGE IN NORMAL YEARS</b>												
1990 Existing Condition	266,605.2	268,750.6	280,007.1	302,856.1	317,848.1	338,728.0	322,854.4	298,935.4	279,030.4	268,454.0	267,165.7	282,998.2
2020 No Action	250,542.7	251,985.1	261,171.4	278,841.4	292,146.9	311,419.0	294,965.4	273,179.1	256,821.4	247,352.2	244,374.9	256,395.0
2020 Demand Side Management CPI	260,610.2	260,383.0	269,121.8	284,745.0	288,515.0	305,453.4	295,449.3	280,065.9	272,893.8	272,604.0	261,602.3	266,840.4
2020 Groundwater CPII	253,457.3	254,857.7	261,917.1	273,218.4	276,532.2	295,891.6	285,274.7	272,515.9	268,641.6	268,901.8	253,993.4	252,044.9
2020 Delta Supply CPIII	252,386.5	252,805.1	259,896.3	273,609.6	277,383.4	297,726.7	286,616.1	272,744.2	267,405.8	268,314.4	255,702.3	256,329.1
2020 Groundwater and FSC CPIV	263,972.6	263,352.5	271,376.9	287,278.8	288,741.8	305,994.5	297,629.5	286,850.4	282,424.3	282,489.2	268,307.4	267,511.6
2020 Raise Pardee CPV	244,536.3	244,969.1	249,673.0	257,864.6	258,219.6	272,334.3	261,678.6	249,265.4	245,357.3	248,410.5	234,744.4	232,181.7
2020 Groundwater Only CPVI	250,057.4	251,516.3	258,202.2	269,702.2	273,237.8	291,940.0	281,669.0	270,311.7	268,285.6	269,005.3	251,801.7	248,231.5
<b>AVERAGE IN WET YEARS</b>												
1990 Existing Condition	260,414.7	262,056.8	295,541.3	329,335.1	360,066.2	409,701.4	381,586.0	332,928.5	288,855.2	265,508.3	258,152.6	281,881.2
2020 No Action	249,982.0	259,555.2	294,091.5	327,280.0	358,433.7	408,307.4	380,390.0	335,209.6	295,708.7	273,605.9	263,832.8	282,256.8
2020 Demand Side Management CPI	253,661.8	259,708.4	293,186.6	325,876.0	356,998.6	400,973.0	375,254.3	331,681.6	296,987.0	282,708.0	269,340.3	285,706.5
2020 Groundwater CPII	249,711.0	259,024.9	292,743.7	325,242.2	356,903.6	401,860.9	377,741.7	342,413.9	317,389.2	305,305.4	284,858.8	284,689.2
2020 Delta Supply CPIII	249,278.7	256,572.3	291,404.6	324,153.3	356,138.5	400,696.8	375,712.4	335,542.9	304,982.2	291,561.2	274,709.4	283,728.7
2020 Groundwater and FSC CPIV	258,953.2	262,117.0	295,295.5	328,906.4	358,712.7	401,949.8	377,783.9	342,366.0	317,295.3	305,056.5	286,282.7	287,996.2
2020 Raise Pardee CPV	233,848.5	245,671.0	280,100.8	312,164.9	349,486.0	396,700.9	372,318.9	333,390.2	304,242.8	294,411.3	277,816.3	283,614.8
2020 Groundwater Only CPVI	249,327.9	258,945.0	292,196.0	324,081.4	356,298.6	400,984.4	377,911.4	347,199.9	326,896.9	316,367.9	292,499.7	284,575.4

C-1101593

**Camanche Reservoir Elevation  
1921-1990 Hydrology Database**

ALTERNATIVE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
<b><u>AVERAGE IN DRY YEARS</u></b>												
1990 Existing Condition	207.7	207.1	205.8	204.0	201.2	198.6	195.5	192.7	190.6	188.9	187.2	185.6
2020 No Action	200.8	200.0	198.5	196.2	192.8	189.2	184.8	181.5	179.2	176.8	174.3	171.3
2020 Demand Side Management CPI	203.8	202.1	199.9	196.4	193.2	192.3	190.5	189.0	188.7	189.3	186.0	183.3
2020 Groundwater CPII	203.0	202.1	200.1	197.4	195.1	193.2	192.0	190.6	190.8	190.7	187.7	185.1
2020 Delta Supply CPIII	202.0	200.1	197.7	194.1	190.6	189.1	186.8	184.6	184.4	184.7	181.5	179.2
2020 Groundwater and FSC CPIV	204.9	204.0	202.1	199.4	196.8	194.9	193.8	192.3	192.1	192.0	189.1	186.5
2020 Raise Pardee CPV	196.3	194.0	191.1	186.5	184.8	184.2	183.4	183.2	184.3	186.4	182.9	179.8
2020 Groundwater Only CPVI	204.0	203.2	202.0	199.3	196.7	194.4	192.7	191.0	190.9	190.3	187.1	185.1
<b><u>AVERAGE IN NORMAL YEARS</u></b>												
1990 Existing Condition	208.8	209.2	211.1	214.9	217.4	221.2	218.9	215.3	212.3	210.6	210.6	213.5
2020 No Action	204.4	204.7	206.6	209.9	212.7	216.4	213.9	210.0	207.4	205.8	205.5	208.1
2020 Demand Side Management CPI	207.9	207.8	209.3	211.8	212.8	215.9	214.6	212.4	211.6	211.8	209.9	210.6
2020 Groundwater CPII	206.6	206.9	208.0	209.8	210.9	214.5	213.1	211.2	210.8	211.1	208.5	208.1
2020 Delta Supply CPIII	206.2	206.3	207.4	209.8	210.9	214.8	213.3	211.3	210.7	211.0	208.9	208.9
2020 Groundwater and FSC CPIV	208.4	208.3	209.6	212.2	212.9	216.2	215.1	213.6	213.2	213.3	211.0	210.7
2020 Raise Pardee CPV	204.5	204.5	205.0	205.9	206.2	209.3	207.9	206.3	206.1	207.1	204.5	203.8
2020 Groundwater Only CPVI	206.1	206.4	207.5	209.3	210.4	214.1	212.7	210.9	210.8	211.1	208.1	207.5
<b><u>AVERAGE IN WET YEARS</u></b>												
1990 Existing Condition	208.6	208.8	214.0	219.1	223.5	230.4	226.7	219.8	213.1	209.3	208.0	211.9
2020 No Action	206.3	208.0	213.7	218.7	223.3	230.3	226.5	220.2	214.2	210.6	209.0	212.0
2020 Demand Side Management CPI	207.0	208.1	213.5	218.5	223.1	229.3	225.8	219.6	214.4	212.1	209.9	212.5
2020 Groundwater CPII	207.4	209.0	214.4	219.2	223.7	229.5	226.2	221.2	217.5	215.6	212.4	212.4
2020 Delta Supply CPIII	206.2	207.5	213.2	218.2	223.0	229.2	225.9	220.2	215.6	213.5	210.8	212.2
2020 Groundwater and FSC CPIV	209.0	209.5	214.8	219.8	224.0	229.5	226.2	221.2	217.5	215.6	212.6	212.9
2020 Raise Pardee CPV	203.3	205.7	211.2	216.2	222.0	228.7	225.4	219.9	215.5	213.9	211.3	212.2
2020 Groundwater Only CPVI	207.1	208.7	214.0	218.7	223.3	229.3	226.2	221.9	218.9	217.3	213.6	212.3

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**Camanche Releases under Alternative Conditions**
**Simulated Mean Monthly Flow (cfs)**
**1921-1990 Hydrology Database**

ALTERNATIVE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
<b>AVERAGE IN DRY YEARS</b>												
1990 Existing Condition	136.9	98.8	120.1	159.8	238.8	303.4	298.8	253.0	178.4	116.1	115.0	146.0
2020 No Action	114.0	96.0	123.0	169.0	246.0	309.0	301.2	255.1	179.5	116.4	115.0	146.0
2020 Demand Side Management CPI	200.7	200.0	199.2	280.0	453.5	310.9	301.2	257.4	186.4	131.8	219.6	192.7
2020 Groundwater CPII	118.3	111.3	172.1	210.3	321.5	309.0	198.9	200.5	101.6	130.4	216.6	183.0
2020 Delta Supply CPIII	200.5	200.0	199.2	280.0	453.5	310.9	301.2	257.4	186.4	131.8	219.6	192.7
2020 Groundwater and FSC CPIV	118.3	111.3	172.1	216.6	345.3	309.5	218.4	211.3	117.1	130.4	217.2	184.1
2020 Raise Pardee CPV	200.5	200.0	199.2	280.0	423.8	310.6	301.2	257.4	186.4	127.3	210.5	185.9
2020 Groundwater Only CPVI	103.7	95.9	103.5	210.5	322.3	309.0	198.9	200.5	101.6	131.8	216.6	133.7
<b>AVERAGE IN NORMAL YEARS</b>												
1990 Existing Condition	199.5	253.3	218.3	174.5	530.9	637.2	618.4	560.2	438.6	287.0	314.0	635.2
2020 No Action	180.2	216.8	200.5	174.9	462.5	570.6	554.0	490.7	362.3	237.3	274.4	513.5
2020 Demand Side Management CPI	245.5	301.8	272.6	271.2	736.6	724.2	565.7	492.3	367.1	266.5	408.9	632.9
2020 Groundwater CPII	221.0	231.8	245.0	256.3	668.7	624.9	498.1	442.4	318.5	261.9	384.7	540.7
2020 Delta Supply CPIII	235.5	253.9	254.5	268.3	697.5	627.2	522.4	455.9	333.8	245.0	384.5	552.5
2020 Groundwater and FSC CPIV	226.7	296.8	262.1	263.0	697.4	663.1	516.3	453.5	328.5	266.9	403.4	605.1
2020 Raise Pardee CPV	235.5	249.5	255.7	268.2	697.4	626.9	522.6	456.1	333.9	232.0	384.8	542.1
2020 Groundwater Only CPVI	204.6	208.8	217.2	239.9	625.5	601.4	464.3	414.5	285.8	253.5	382.0	494.8
<b>AVERAGE IN WET YEARS</b>												
1990 Existing Condition	1,058.4	1,385.6	894.2	894.3	1,971.9	1,606.2	1,092.6	1,025.3	897.7	583.3	515.7	497.1
2020 No Action	956.4	1,178.5	829.4	855.0	1,883.4	1,513.3	1,005.9	923.6	781.8	508.8	479.7	464.7
2020 Demand Side Management CPI	1,061.4	1,309.9	909.9	938.3	1,997.0	1,733.4	1,085.8	984.6	846.6	519.1	574.9	549.2
2020 Groundwater CPII	962.9	1,194.0	849.3	886.3	1,905.0	1,626.7	983.9	886.1	750.7	544.0	551.4	515.0
2020 Delta Supply CPIII	961.8	1,242.4	854.5	888.8	1,909.2	1,645.1	1,003.2	902.3	765.0	491.1	555.2	519.6
2020 Groundwater and FSC CPIV	1,014.0	1,323.4	874.0	904.0	1,936.2	1,655.4	987.1	887.7	751.8	546.8	555.9	526.4
2020 Raise Pardee CPV	960.9	1,064.6	815.7	869.5	1,839.5	1,600.3	988.7	889.8	753.4	443.4	552.6	518.1
2020 Groundwater Only CPVI	907.4	1,161.2	837.0	870.6	1,854.3	1,596.0	935.4	835.9	701.4	545.8	544.9	505.7

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**Flow at Victor under Alternative Conditions**

**Simulated Mean Monthly Flow (cfs)**

**1921-1990 Hydrology Database**

ALTERNATIVE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
<b><u>AVERAGE IN DRY YEARS</u></b>												
1990 Existing Condition	115.9	79.9	95.1	122.8	179.8	225.5	234.7	203.7	145.0	94.1	95.0	121.0
2020 No Action	93.0	77.0	95.0	123.0	177.0	220.0	227.1	195.9	140.7	93.4	95.0	121.0
2020 Demand Side Management CPI	179.2	181.0	171.2	233.0	383.8	222.5	227.5	198.2	147.0	108.2	200.6	167.7
2020 Groundwater CPII	181.0	176.2	166.7	178.3	286.5	220.0	162.7	166.1	75.5	108.5	200.6	167.7
2020 Delta Supply CPIII	178.9	181.0	171.2	233.0	383.8	222.5	227.5	198.2	147.0	108.2	200.6	167.7
2020 Groundwater and FSC CPIV	181.0	176.2	166.7	183.3	303.9	220.7	173.3	171.0	87.8	108.5	200.6	167.7
2020 Raise Pardee CPV	178.9	181.0	171.2	233.0	354.3	222.2	227.5	198.2	147.0	103.7	191.5	160.9
2020 Groundwater Only CPVI	181.3	176.2	166.8	178.5	287.3	220.0	162.7	166.1	75.5	108.2	200.6	168.5
<b><u>AVERAGE IN NORMAL YEARS</u></b>												
1990 Existing Condition	178.1	234.1	192.7	137.0	456.5	539.0	519.6	488.5	392.1	259.4	294.1	609.6
2020 No Action	158.8	197.7	172.1	128.4	369.7	450.7	432.8	401.8	305.5	206.0	254.4	488.1
2020 Demand Side Management CPI	223.9	282.5	244.1	223.8	640.9	600.3	440.2	400.6	309.1	233.6	389.5	607.1
2020 Groundwater CPII	206.8	219.2	221.0	207.0	564.2	489.2	373.4	341.9	245.0	206.6	364.2	518.3
2020 Delta Supply CPIII	213.8	234.7	226.1	220.9	609.5	514.0	409.0	371.8	280.4	214.7	365.2	526.8
2020 Groundwater and FSC CPIV	212.6	284.2	238.1	212.3	586.9	523.8	383.1	348.6	252.8	210.6	382.7	582.1
2020 Raise Pardee CPV	213.9	230.3	227.3	220.8	609.3	513.7	409.1	372.0	280.6	201.7	365.5	516.5
2020 Groundwater Only CPVI	204.6	210.4	208.3	198.3	523.4	460.6	339.7	312.2	209.1	195.0	362.5	484.3
<b><u>AVERAGE IN WET YEARS</u></b>												
1990 Existing Condition	1,030.5	1,361.1	861.3	849.2	1,877.7	1,482.9	967.4	935.0	837.4	546.7	490.8	465.2
2020 No Action	930.0	1,155.2	795.6	802.5	1,753.8	1,343.8	830.5	798.5	701.6	462.9	456.1	434.1
2020 Demand Side Management CPI	1,033.5	1,285.4	874.5	883.9	1,865.5	1,562.2	908.5	857.6	764.8	471.9	550.1	517.1
2020 Groundwater CPII	928.1	1,157.5	806.0	788.1	1,699.1	1,377.5	732.4	683.9	590.3	420.0	522.1	480.9
2020 Delta Supply CPIII	935.1	1,218.9	820.5	835.9	1,779.3	1,475.5	827.4	776.9	684.6	444.8	531.4	488.7
2020 Groundwater and FSC CPIV	979.0	1,286.5	830.3	805.5	1,728.8	1,404.3	733.6	684.3	590.6	422.1	526.3	492.0
2020 Raise Pardee CPV	934.2	1,041.1	781.7	816.6	1,711.7	1,433.5	816.3	766.4	674.2	397.8	528.9	487.3
2020 Groundwater Only CPVI	874.5	1,126.6	793.6	761.5	1,623.4	1,320.5	658.3	608.7	515.3	395.6	516.1	472.3

C-1101596

**Flow Below Lake Lodi under Alternative Conditions**

**Simulated Mean Monthly Flow (cfs)**

**1921-1990 Hydrology Database**

ALTERNATIVE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
<b><u>AVERAGE IN DRY YEARS</u></b>												
1990 Existing Condition	69.9	39.9	38.0	13.0	23.0	30.0	24.0	17.8	12.2	32.7	58.0	75.0
2020 No Action	47.0	37.0	38.0	13.0	23.0	30.0	24.0	17.8	12.2	35.4	58.0	75.0
2020 Demand Side Management CPI	133.8	141.0	114.2	124.0	229.8	31.9	24.0	20.1	19.0	50.2	162.6	121.7
2020 Groundwater CPII	135.2	136.2	110.5	124.0	228.9	30.0	28.5	22.3	19.5	50.5	162.6	121.7
2020 Delta Supply CPIII	133.5	141.0	114.2	124.0	229.8	31.9	24.0	20.1	19.0	50.2	162.6	121.7
2020 Groundwater and FSC CPIV	135.2	136.2	110.5	124.0	228.9	30.5	28.5	22.3	19.5	50.5	162.6	121.7
2020 Raise Pardee CPV	133.5	141.0	114.2	124.0	200.3	31.6	24.0	20.1	19.0	45.7	153.5	114.9
2020 Groundwater Only CPVI	135.7	136.2	111.1	124.0	229.5	30.0	28.5	22.3	19.5	50.2	162.6	122.5
<b><u>AVERAGE IN NORMAL YEARS</u></b>												
1990 Existing Condition	131.2	193.2	133.7	27.8	270.0	287.7	230.1	222.1	215.1	163.6	255.9	562.6
2020 No Action	112.1	156.9	113.2	19.4	183.4	199.6	143.5	135.6	128.6	109.7	216.5	441.2
2020 Demand Side Management CPI	177.2	241.6	185.1	115.6	454.5	349.0	150.7	134.3	132.1	137.8	350.8	560.2
2020 Groundwater CPII	160.3	178.5	162.7	110.6	399.2	238.2	94.9	81.0	78.9	110.9	325.5	471.5
2020 Delta Supply CPIII	167.3	193.9	167.2	112.9	423.3	263.0	119.7	105.8	103.5	119.0	326.5	480.1
2020 Groundwater and FSC CPIV	165.9	243.3	179.6	110.8	412.9	272.7	100.9	85.7	83.7	114.8	344.0	535.3
2020 Raise Pardee CPV	167.4	189.5	168.5	112.8	423.1	262.7	119.8	105.9	103.7	106.0	326.8	469.7
2020 Groundwater Only CPVI	158.3	169.9	150.6	110.4	370.8	209.9	67.9	54.0	51.9	99.5	324.1	437.8
<b><u>AVERAGE IN WET YEARS</u></b>												
1990 Existing Condition	969.1	1,306.9	786.5	723.2	1,674.1	1,215.0	661.2	653.7	646.7	440.8	440.3	403.5
2020 No Action	872.0	1,104.2	724.4	680.4	1,554.3	1,080.3	528.9	521.3	514.3	359.4	408.2	375.9
2020 Demand Side Management CPI	972.3	1,231.4	799.8	758.1	1,662.0	1,294.4	602.4	576.4	574.0	366.0	499.1	455.4
2020 Groundwater CPII	869.9	1,106.1	734.7	667.8	1,502.9	1,113.3	433.3	407.7	405.5	316.2	473.7	422.0
2020 Delta Supply CPIII	876.8	1,167.5	749.0	713.5	1,579.4	1,211.3	525.2	499.1	496.9	341.2	482.9	429.9
2020 Groundwater and FSC CPIV	919.8	1,234.4	758.1	684.2	1,531.4	1,139.2	433.3	407.0	404.8	317.7	477.0	432.2
2020 Raise Pardee CPV	876.0	989.7	710.3	694.4	1,512.0	1,169.4	514.3	488.8	486.6	294.3	480.4	428.6
2020 Groundwater Only CPVI	817.3	1,076.2	723.6	642.5	1,428.4	1,057.9	360.7	333.9	331.7	292.9	468.6	414.6

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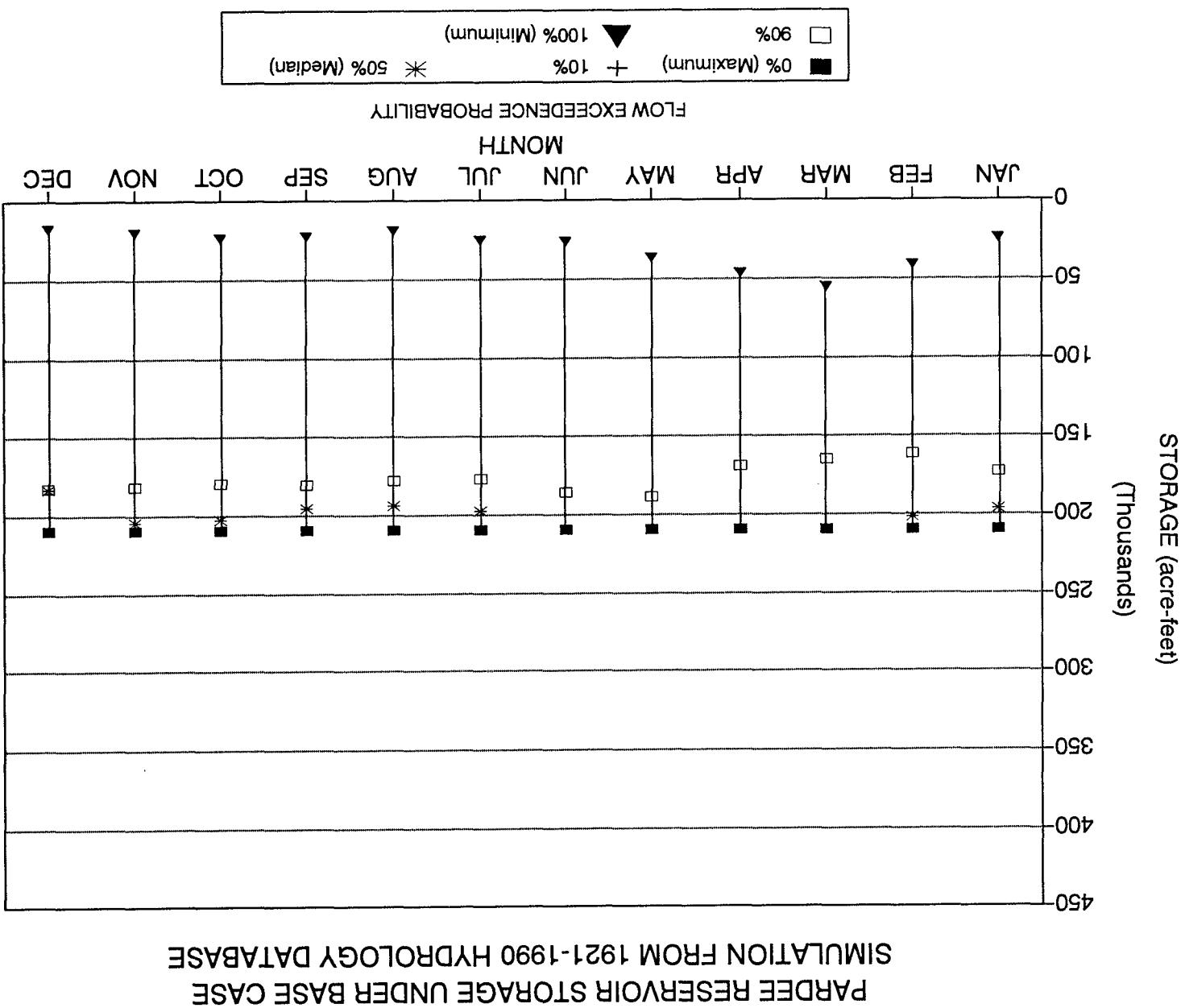
**Flow Into the Delta under Alternative Conditions**

**Simulated Mean Monthly Flow (cfs)**

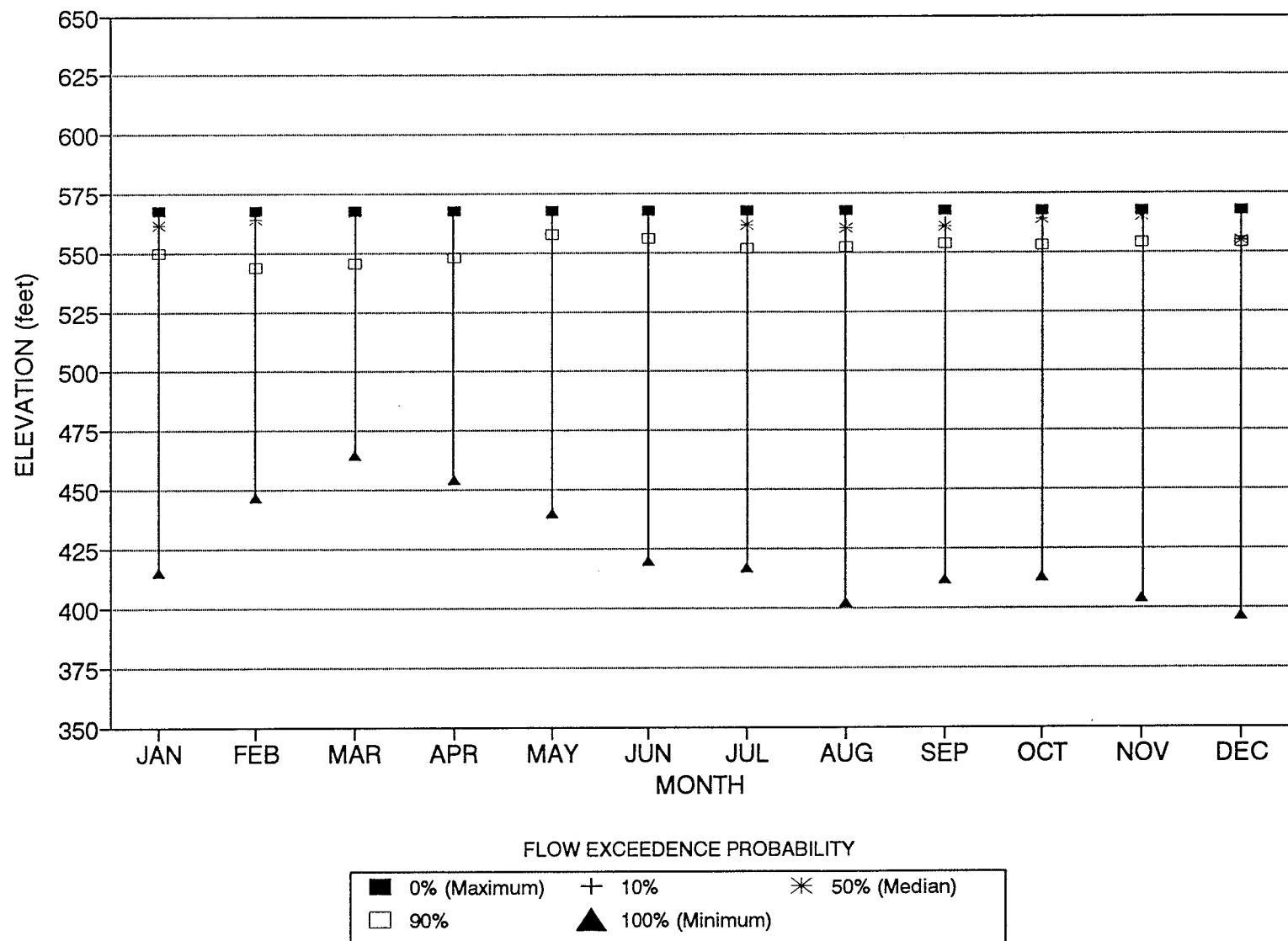
**1921-1990 Hydrology Database**

ALTERNATIVE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
<b><u>AVERAGE IN DRY YEARS</u></b>												
1990 Existing Condition	62.9	32.8	29.0	0.0	0.0	0.0	0.0	0.0	0.0	21.8	50.0	66.0
2020 No Action	40.0	30.0	29.0	0.0	0.0	0.0	0.0	0.0	0.0	24.9	50.0	66.0
2020 Demand Side Management CPI	126.2	133.0	105.2	110.0	206.8	1.9	0.0	1.8	5.8	40.2	154.6	112.7
2020 Groundwater CPII	127.8	128.3	101.5	110.0	206.8	0.0	4.5	4.0	6.5	40.5	154.6	112.7
2020 Delta Supply CPIII	125.9	133.0	105.2	110.0	206.8	1.9	0.0	1.8	5.8	40.2	154.6	112.7
2020 Groundwater and FSC CPIV	127.8	128.3	101.5	110.0	206.8	0.5	4.5	4.0	6.5	40.5	154.6	112.7
2020 Raise Pardee CPV	125.9	133.0	105.2	110.0	177.3	1.6	0.0	1.8	5.8	35.7	145.5	105.9
2020 Groundwater Only CPVI	128.3	128.3	102.1	110.0	206.8	0.0	4.5	4.0	6.5	40.2	154.6	113.1
<b><u>AVERAGE IN NORMAL YEARS</u></b>												
1990 Existing Condition	124.0	185.9	124.7	14.8	247.0	257.4	200.8	200.8	200.8	153.4	247.7	553.2
2020 No Action	104.9	149.7	104.2	6.4	160.4	169.3	114.3	114.3	114.3	99.5	208.3	431.9
2020 Demand Side Management CPI	169.8	233.9	176.1	101.6	431.5	318.8	121.4	113.1	117.4	127.7	342.8	551.1
2020 Groundwater CPII	152.7	170.6	153.7	96.9	376.2	207.9	65.9	59.8	64.0	100.8	317.5	462.3
2020 Delta Supply CPIII	159.9	186.1	158.2	98.9	400.3	232.8	90.6	84.5	88.8	108.9	318.5	470.9
2020 Groundwater and FSC CPIV	158.4	235.6	170.6	96.9	389.9	242.4	71.8	64.7	68.8	104.8	335.9	526.1
2020 Raise Pardee CPV	160.1	181.8	159.5	98.9	400.1	232.5	90.7	84.7	88.9	95.9	318.8	460.5
2020 Groundwater Only CPVI	150.8	162.1	141.6	96.9	347.8	179.7	38.8	32.8	37.0	89.5	316.1	428.4
<b><u>AVERAGE IN WET YEARS</u></b>												
1990 Existing Condition	961.7	1,299.4	777.7	709.7	1,651.1	1,184.4	632.4	632.4	632.4	430.6	431.7	393.9
2020 No Action	864.5	1,096.6	715.6	666.9	1,531.3	1,049.7	500.0	500.0	500.0	349.3	399.8	366.4
2020 Demand Side Management CPI	964.6	1,223.7	790.8	744.6	1,639.0	1,263.6	573.4	555.0	559.7	355.6	491.0	446.2
2020 Groundwater CPII	862.1	1,098.5	725.7	654.0	1,479.9	1,082.8	404.3	386.5	391.1	306.1	465.5	412.9
2020 Delta Supply CPIII	869.2	1,159.9	740.1	699.7	1,556.4	1,180.7	496.3	477.9	482.5	330.7	474.9	420.7
2020 Groundwater and FSC CPIV	912.2	1,226.7	749.2	670.5	1,508.5	1,108.5	404.3	385.8	390.4	307.5	469.0	423.1
2020 Raise Pardee CPV	868.3	982.1	701.4	680.6	1,489.0	1,138.9	485.4	467.7	472.2	283.9	472.3	419.4
2020 Groundwater Only CPVI	809.6	1,068.5	714.6	628.8	1,405.5	1,027.3	331.8	312.7	317.4	282.5	460.4	405.4

C-1101598

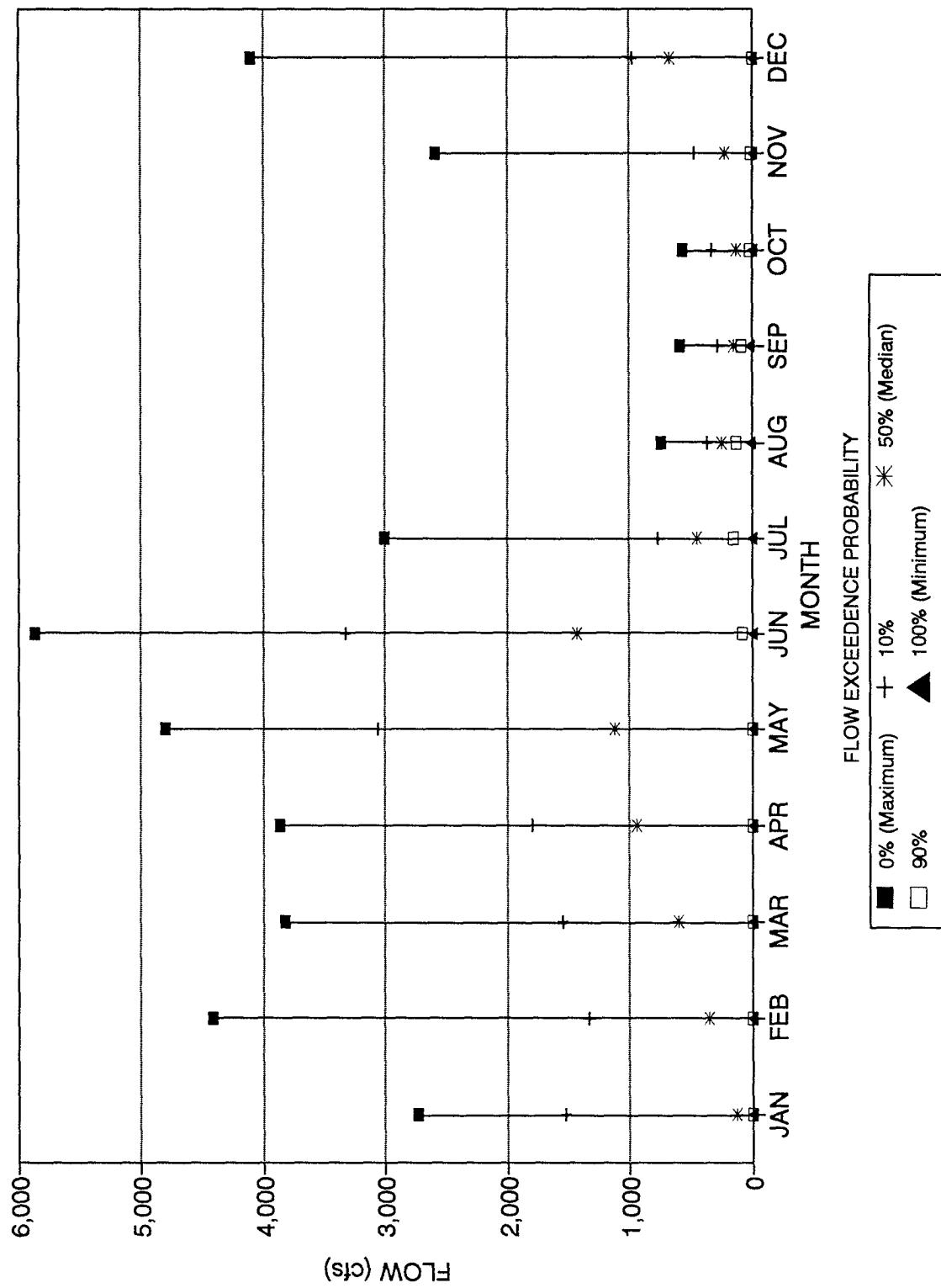


PARDEE RESERVOIR ELEVATION UNDER BASE CASE  
SIMULATION FROM 1921-1990 HYDROLOGY DATABASE

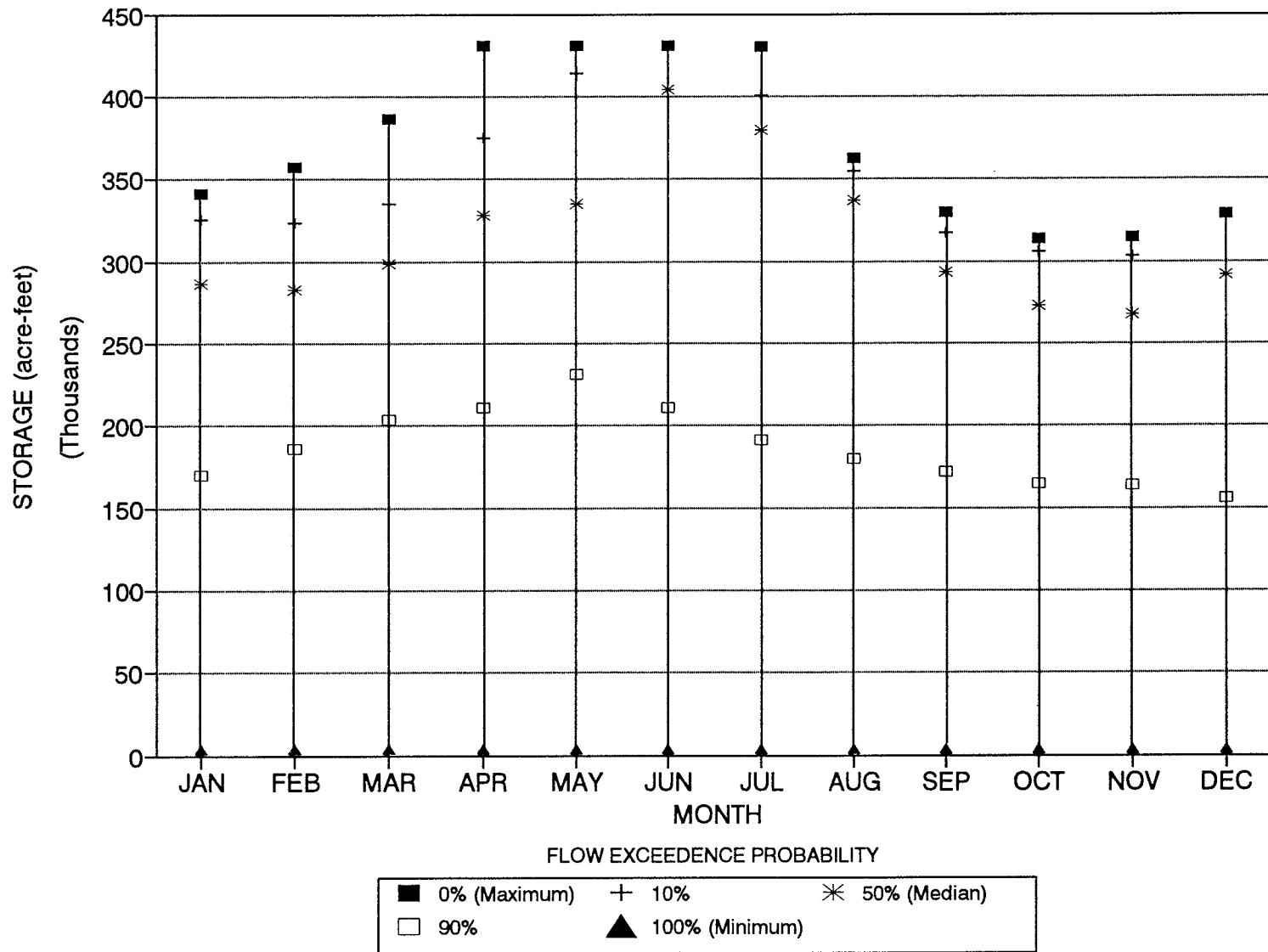


C-101600

PARDEE RELEASES UNDER BASE CASE  
SIMULATION FROM 1921-1990 HYDROLOGY DATABASE

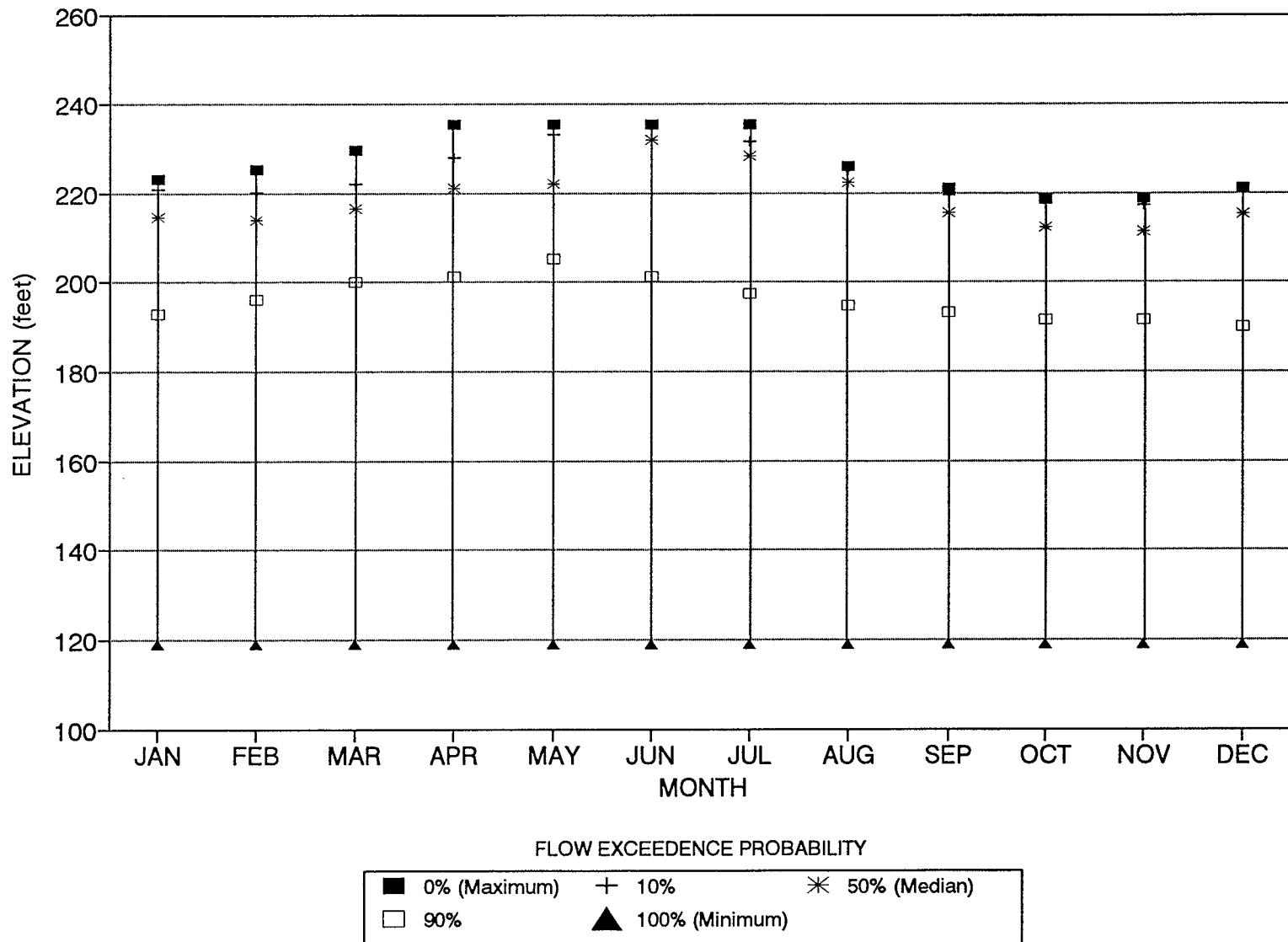


CAMANCHE RESERVOIR STORAGE UNDER BASE CASE  
SIMULATION FROM 1921-1990 HYDROLOGY DATABASE



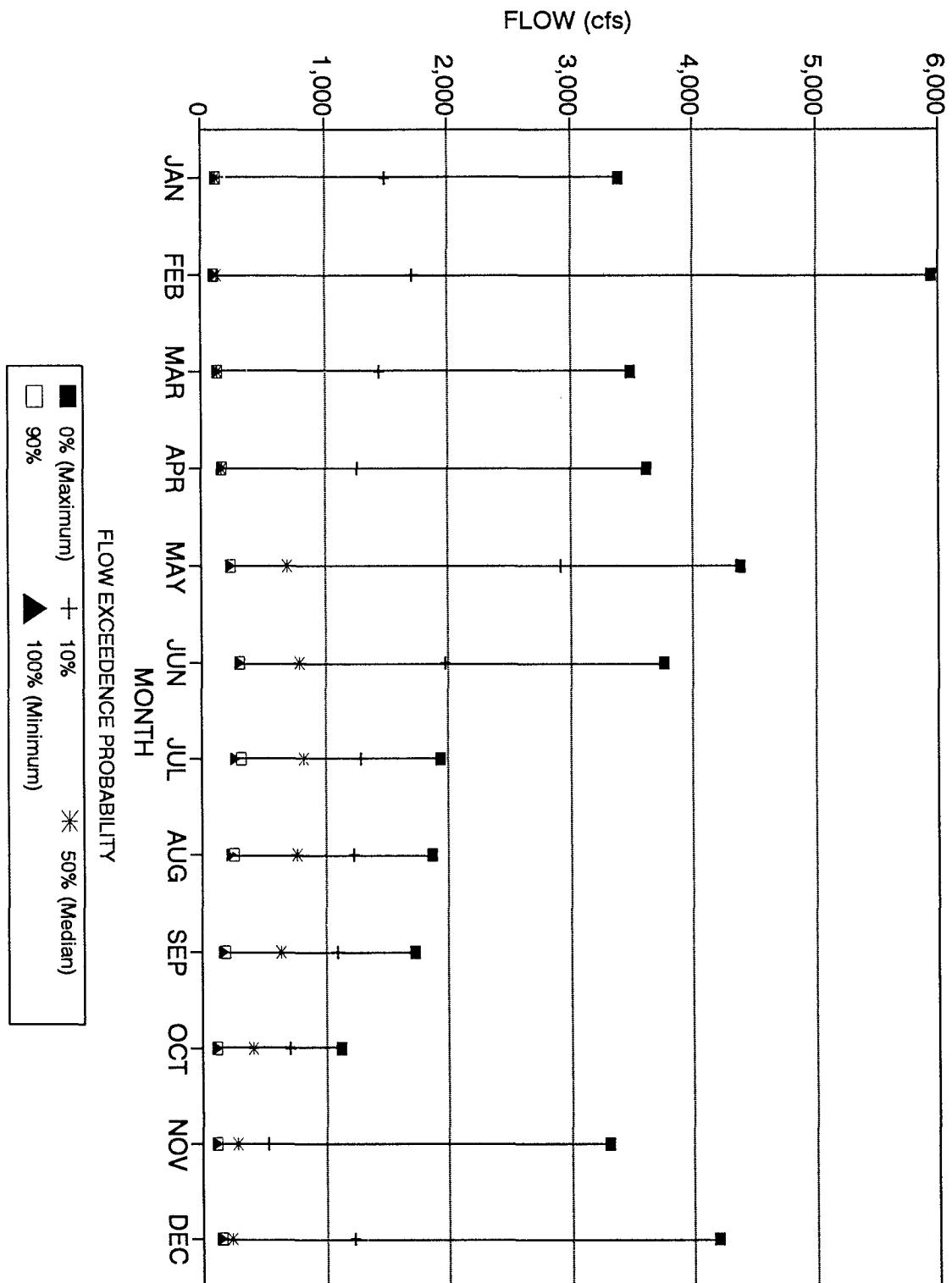
C - 1 0 1 6 0 2

CAMANCHE RESERVOIR ELEVATION UNDER BASE CASE  
SIMULATION FROM 1921-1990 HYDROLOGY DATABASE



C - 1 0 1 6 0 3

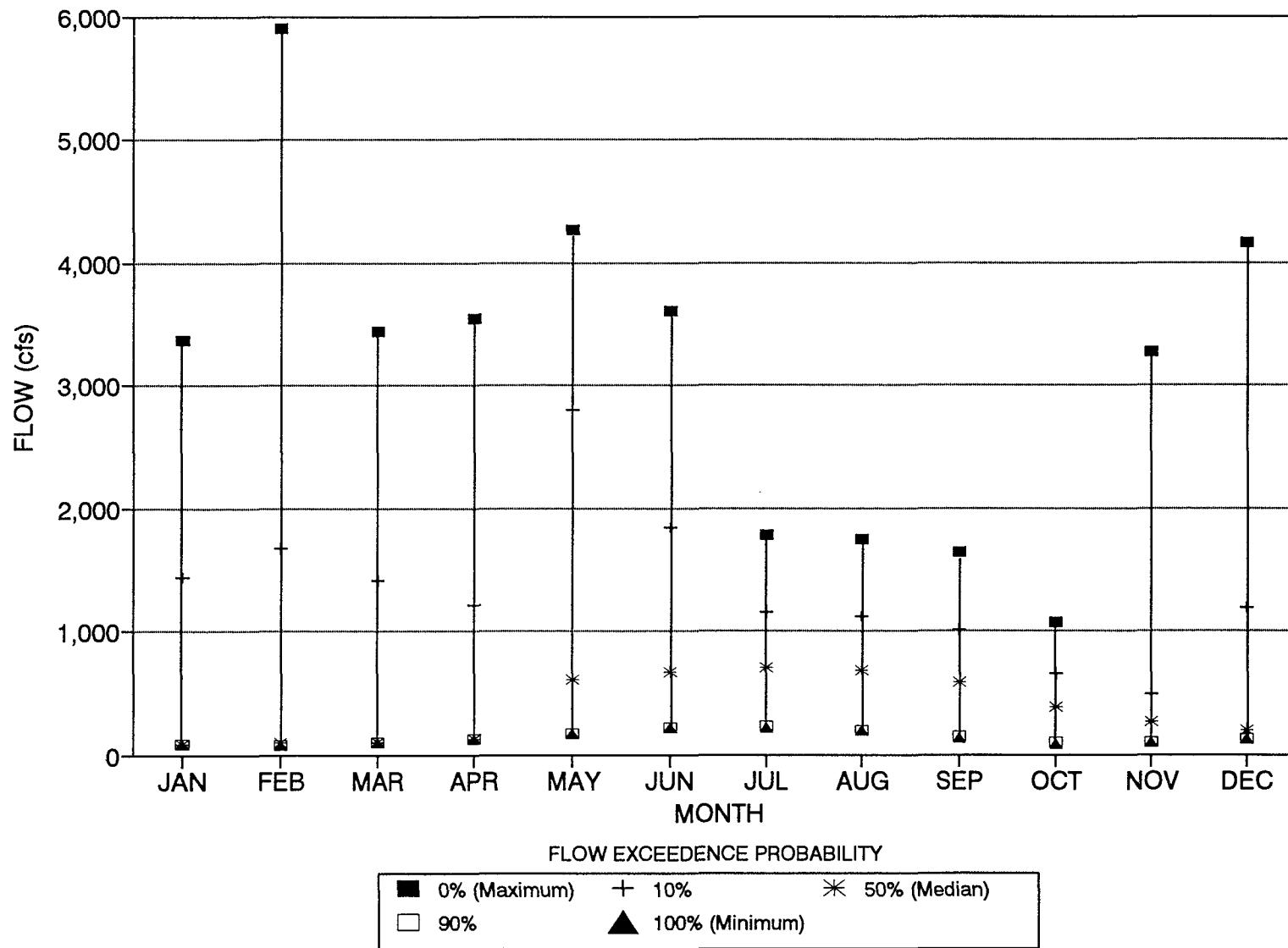
CAMANCHE RELEASES UNDER BASE CASE  
SIMULATION FROM 1921-1990 HYDROLOGY DATABASE



C - 1 0 1 6 0 4

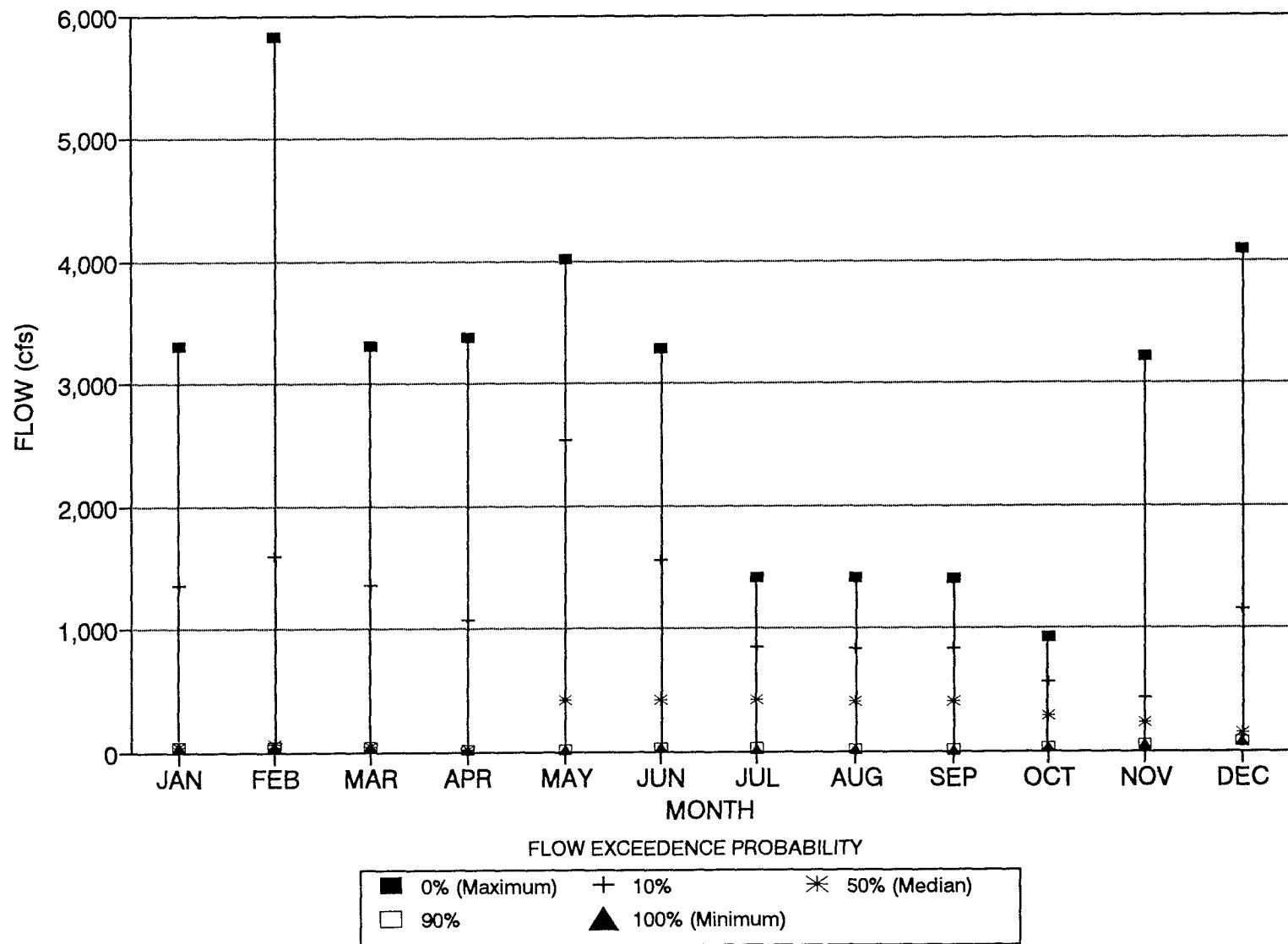
C-101604

FLOW AT VICTOR UNDER BASE CASE  
SIMULATION FROM 1921-1990 HYDROLOGY DATABASE



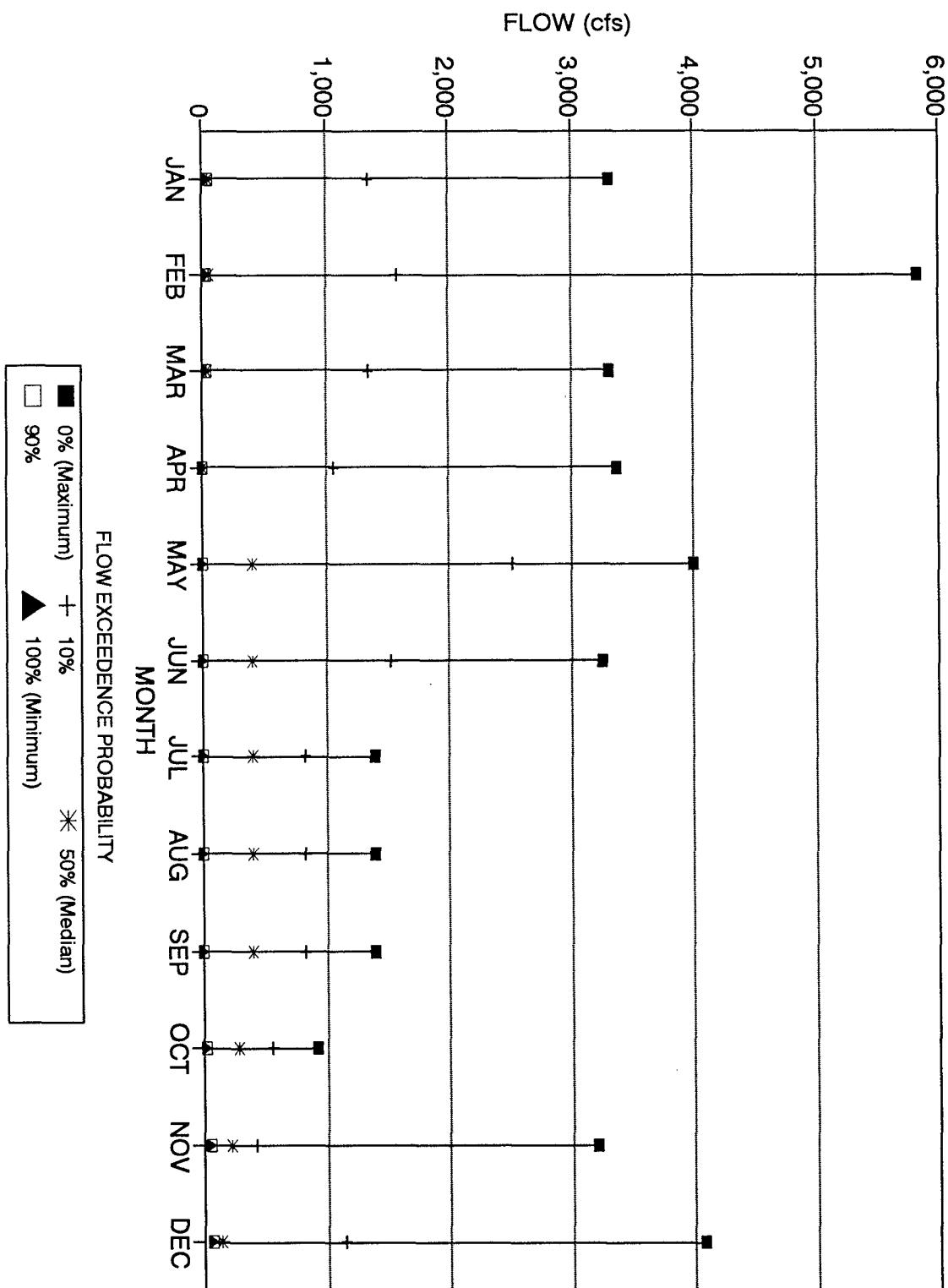
C - 1 0 1 6 0 5

FLOW BELOW LAKE LODI UNDER BASE CASE  
SIMULATION FROM 1921-1990 HYDROLOGY DATABASE



C - 1 0 1 6 0 6

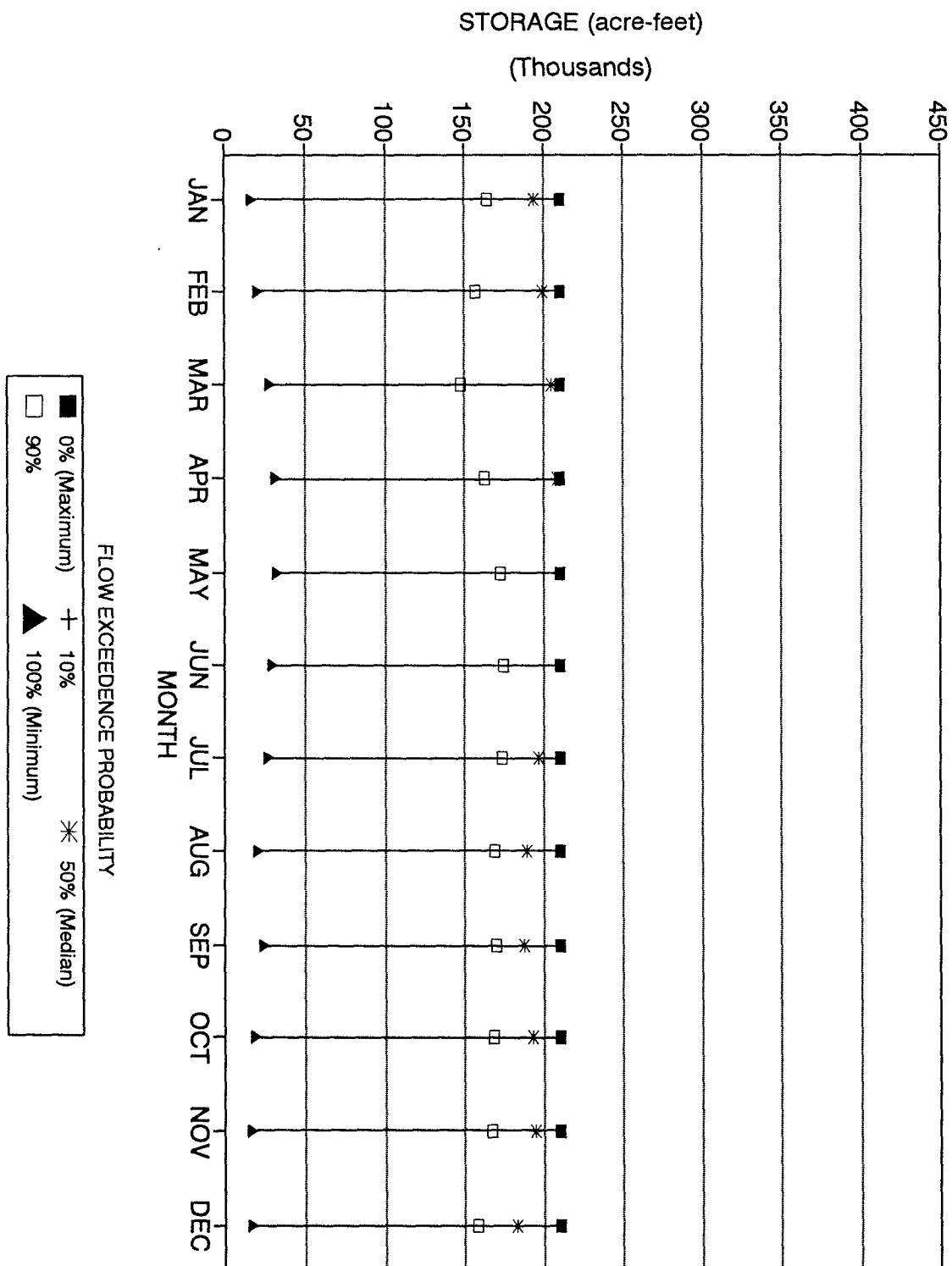
FLOW INTO THE DELTA UNDER BASE CASE  
SIMULATION FROM 1921-1990 HYDROLOGY DATABASE



C - 1 0 1 6 0 7

C-101607

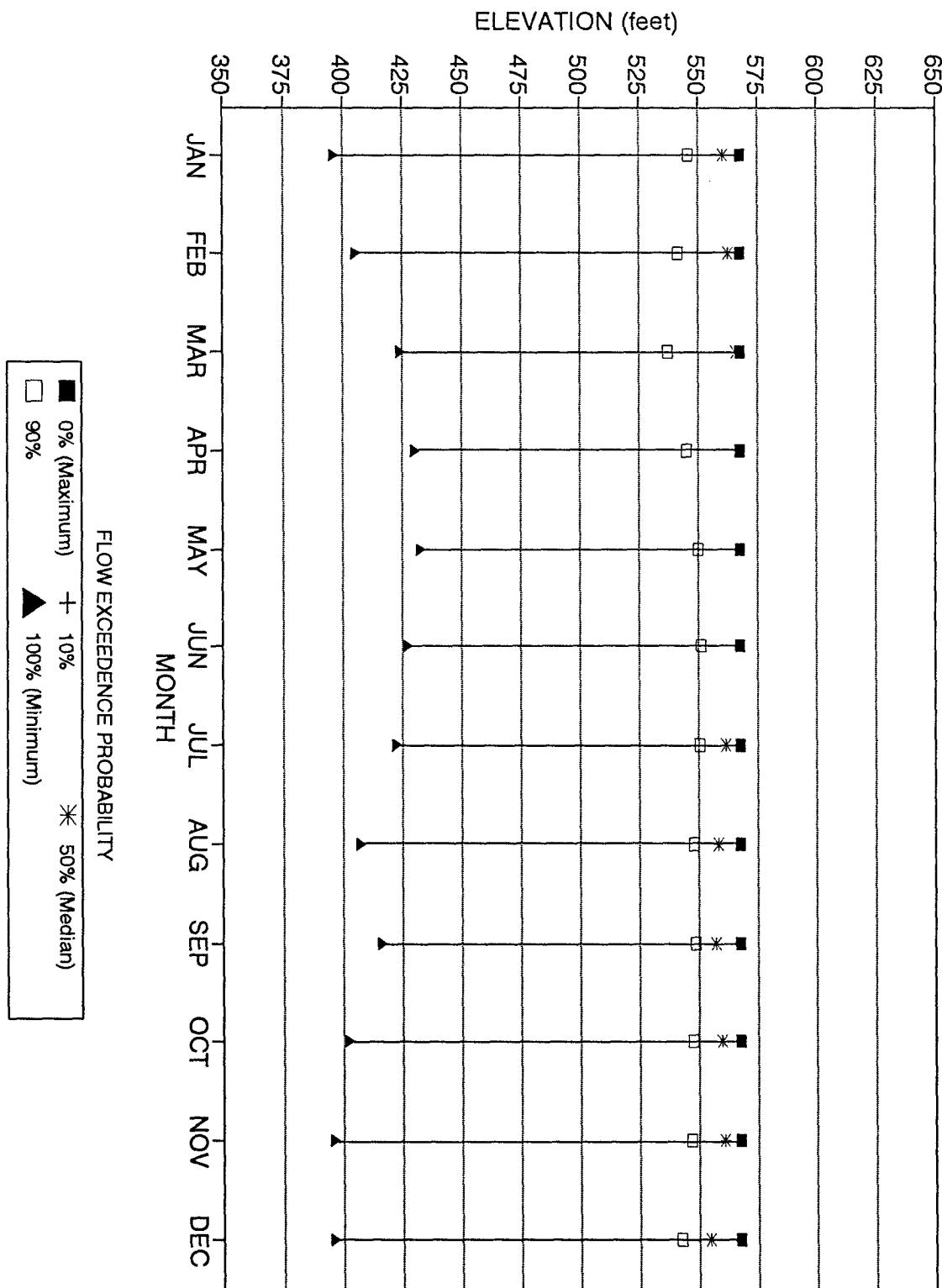
**PARDEE RESERVOIR STORAGE UNDER NO ACTION  
SIMULATION FROM 1921-1990 HYDROLOGY DATABASE**



**C - 1 0 1 6 0 8**

C-101608

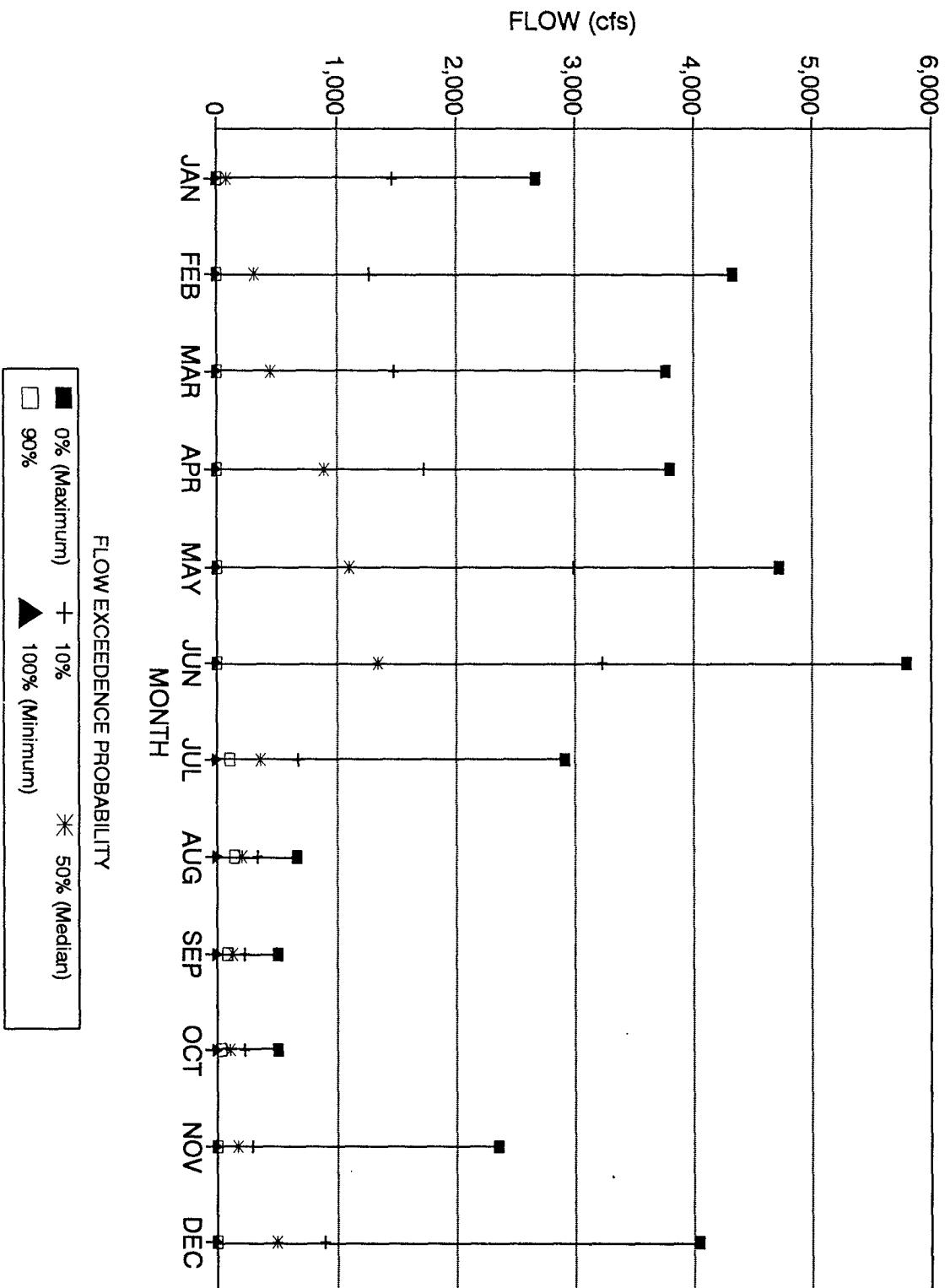
**PARDEE RESERVOIR ELEVATION UNDER NO ACTION  
SIMULATION FROM 1921-1990 HYDROLOGY DATABASE**



FLOW EXCEEDENCE PROBABILITY

- |                |   |     |   |                  |
|----------------|---|-----|---|------------------|
| ■ 0% (Maximum) | + | 10% | * | 50% (Median)     |
| □ 90%          |   |     |   | ▲ 100% (Minimum) |

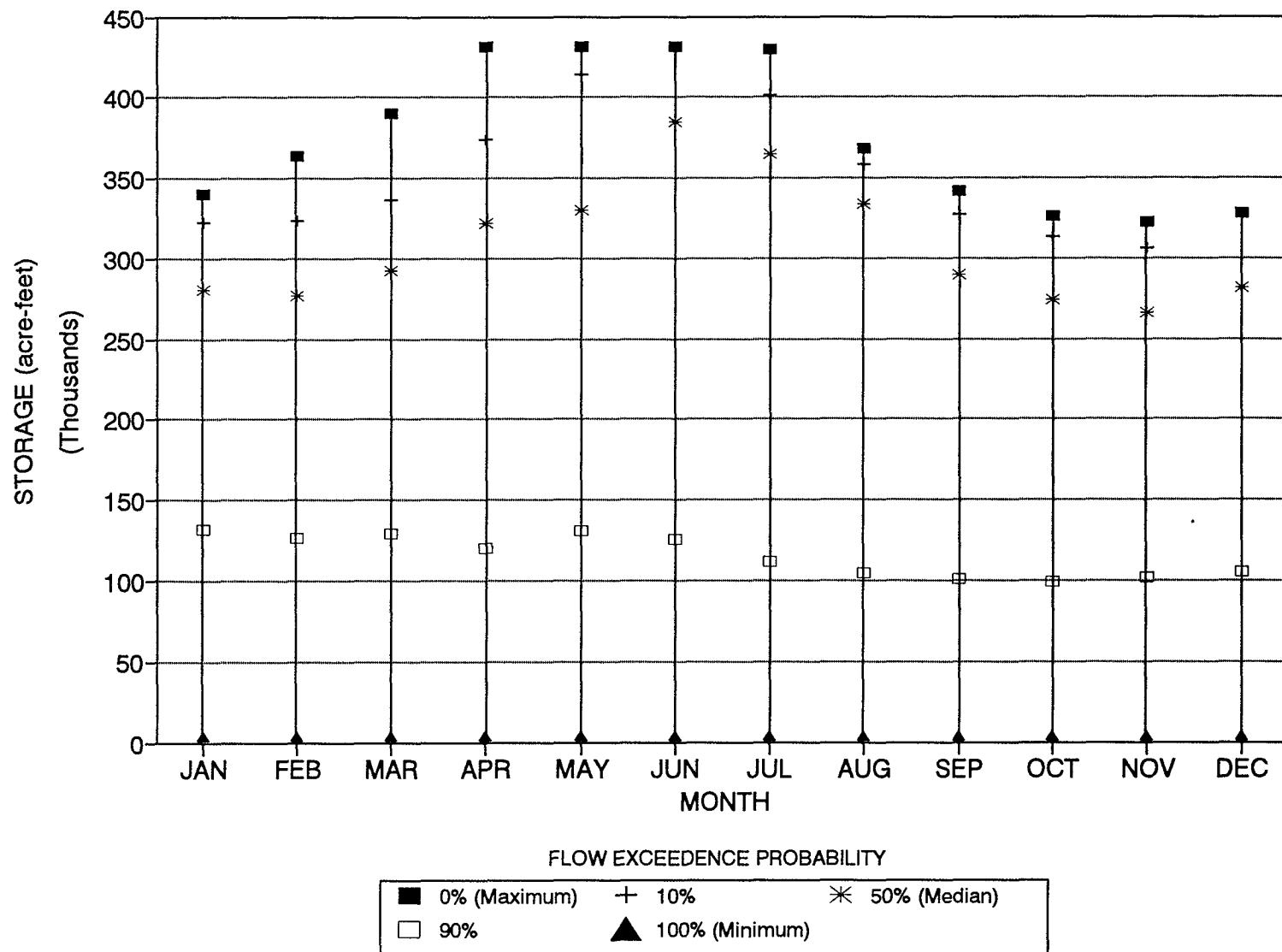
PARDEE RELEASES UNDER NO ACTION  
SIMULATION FROM 1921-1990 HYDROLOGY DATABASE



C - 1 0 1 6 1 0

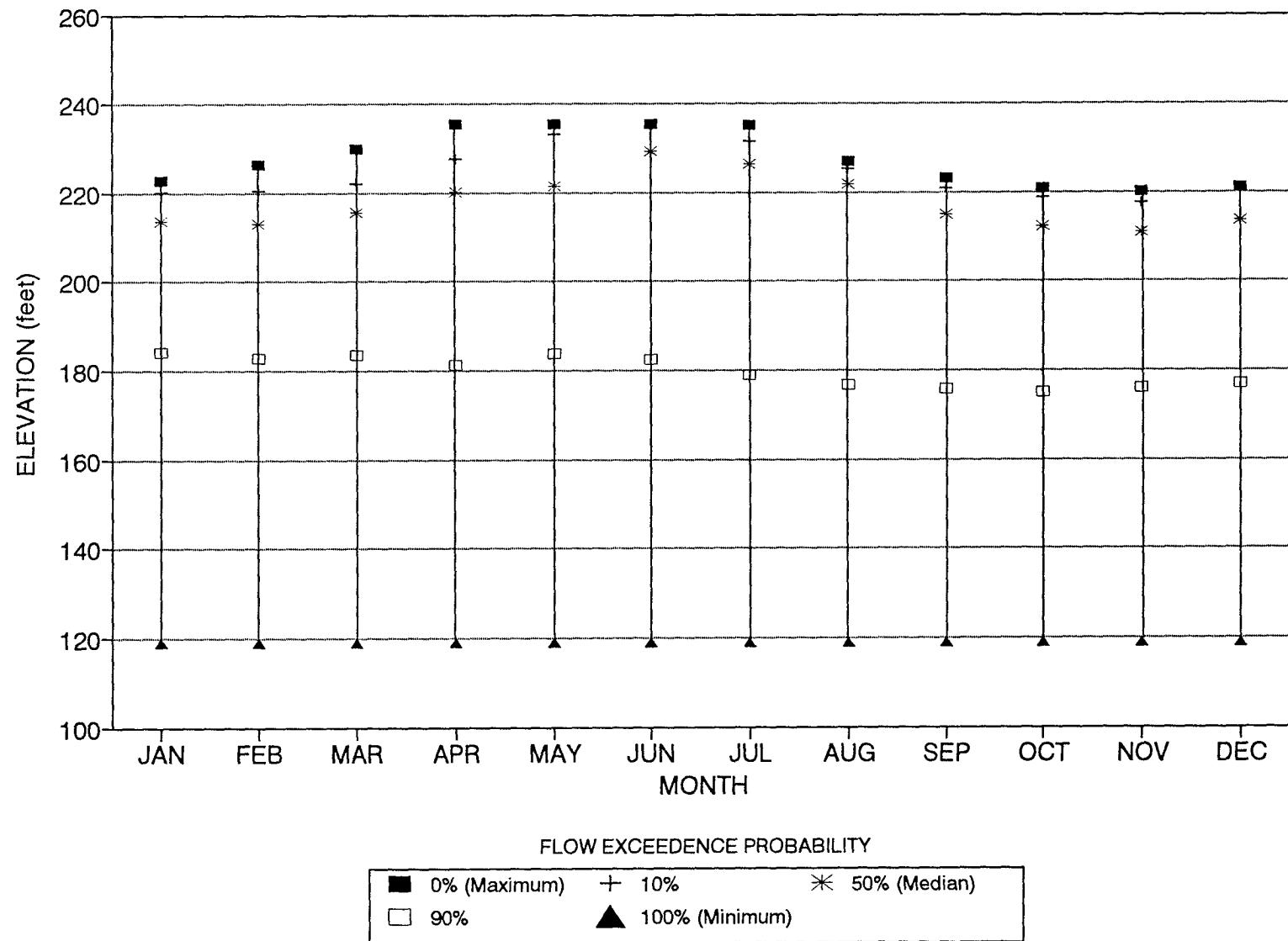
C-101610

CAMANCHE RESERVOIR STORAGE UNDER NO ACTION  
SIMULATION FROM 1921-1990 HYDROLOGY DATABASE

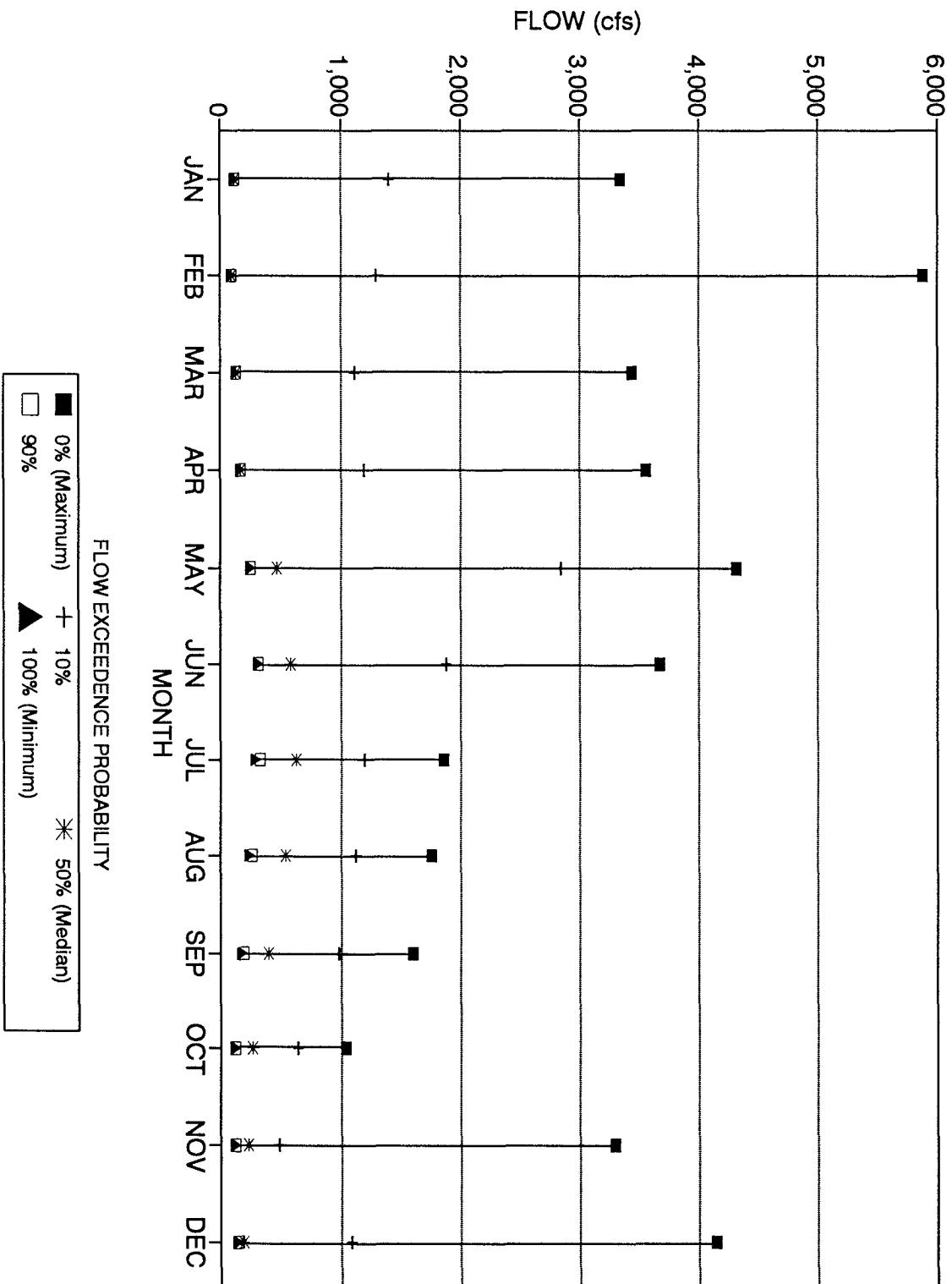


C - 1 0 1 6 1 1

CAMANCHE RESERVOIR ELEVATION UNDER NO ACTION  
SIMULATION FROM 1921-1990 HYDROLOGY DATABASE



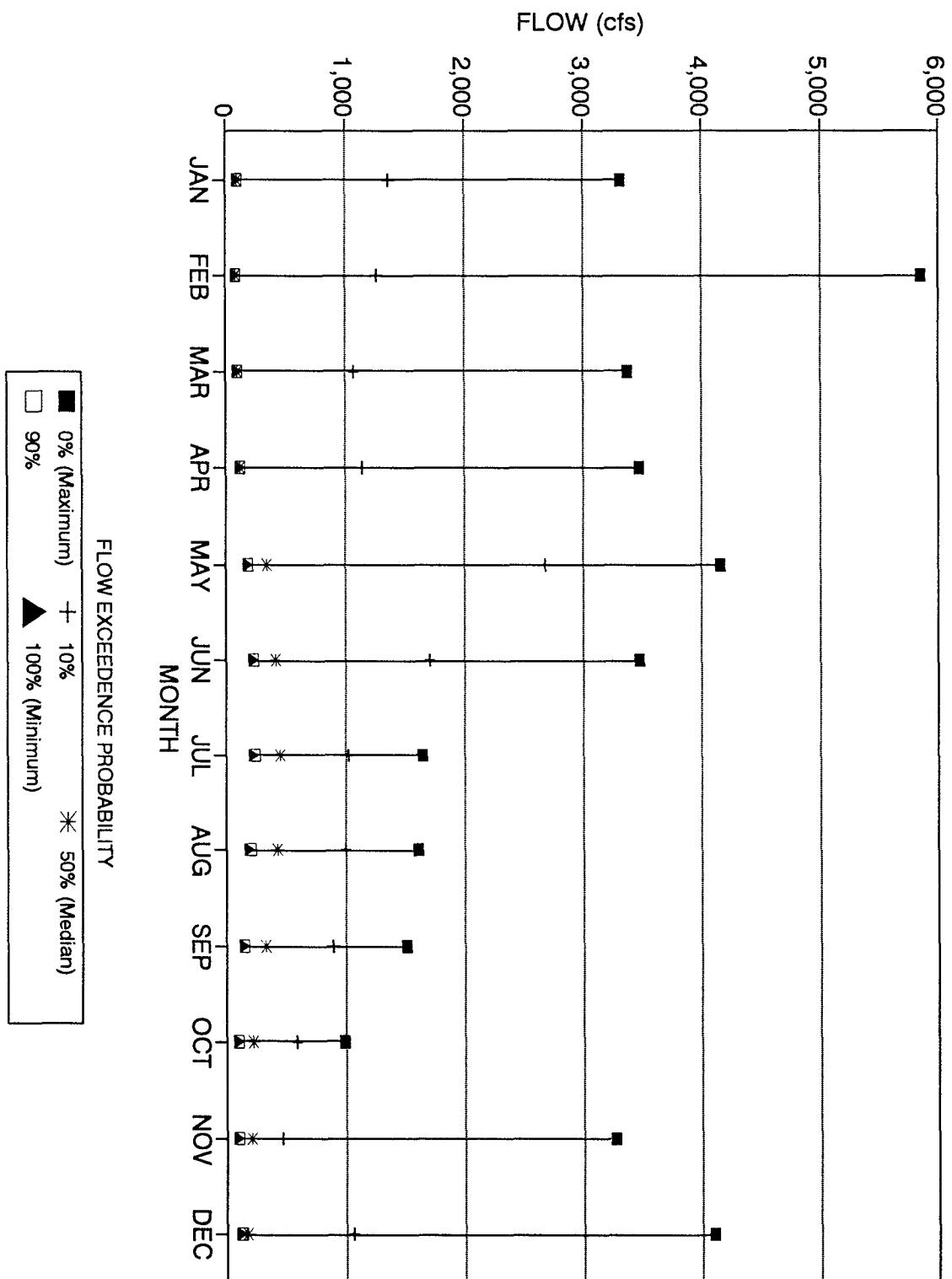
CAMANCHE RELEASES UNDER NO ACTION  
 SIMULATION FROM 1921-1990 HYDROLOGY DATABASE



C - 1 0 1 6 1 3

C-101613

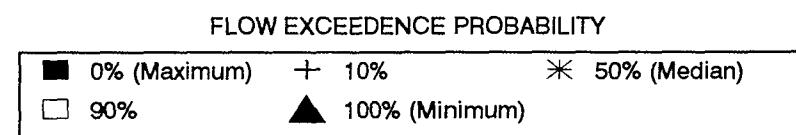
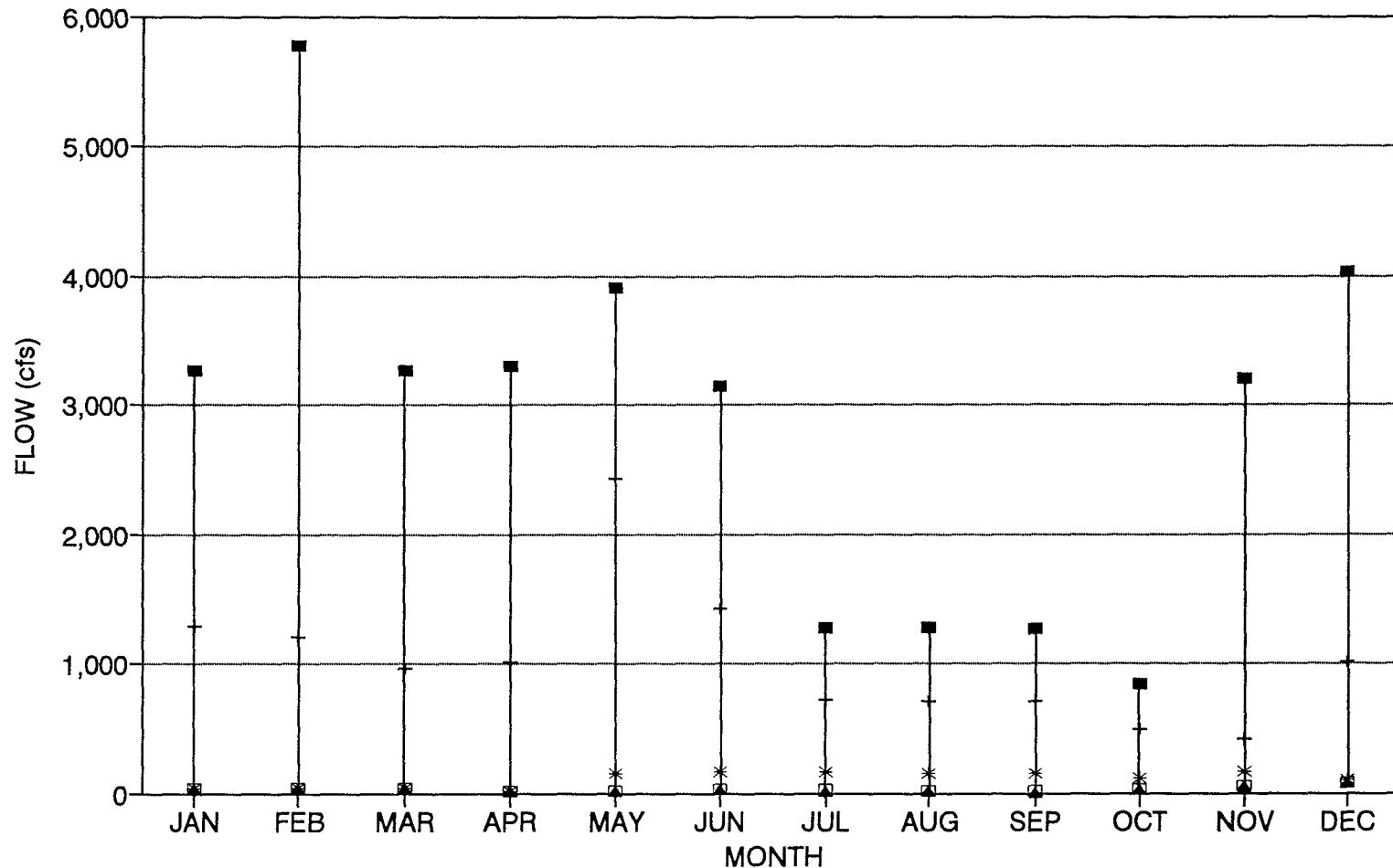
FLOW AT VICTOR UNDER NO ACTION  
SIMULATION FROM 1921-1990 HYDROLOGY DATABASE



C - 1 0 1 6 1 4

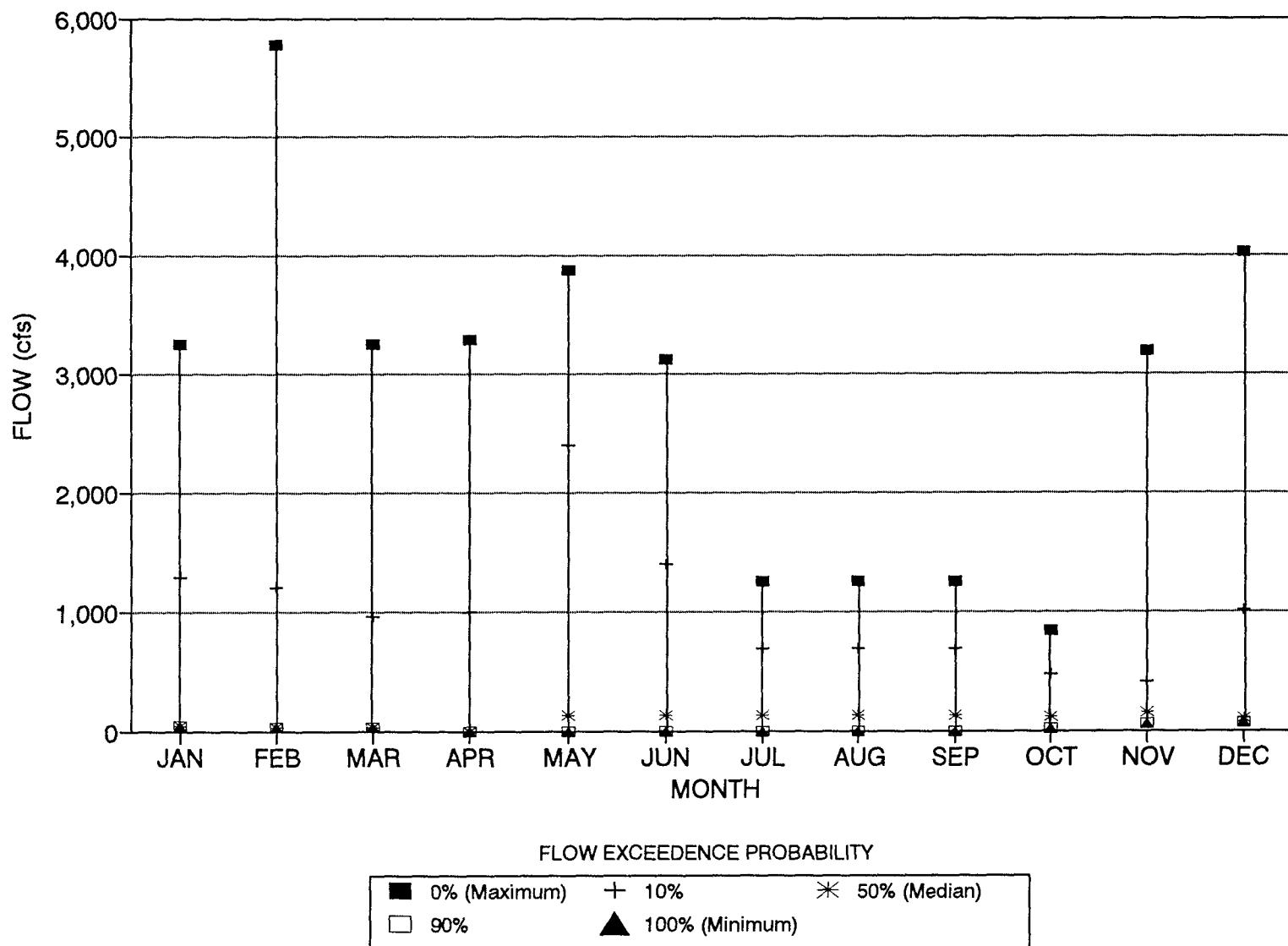
C-101614

FLOW BELOW LAKE LODI UNDER NO ACTION  
SIMULATION FROM 1921-1990 HYDROLOGY DATABASE



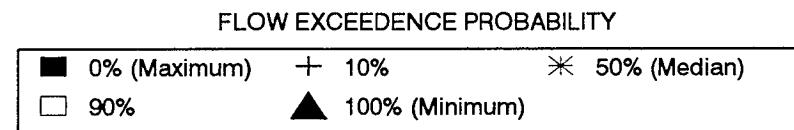
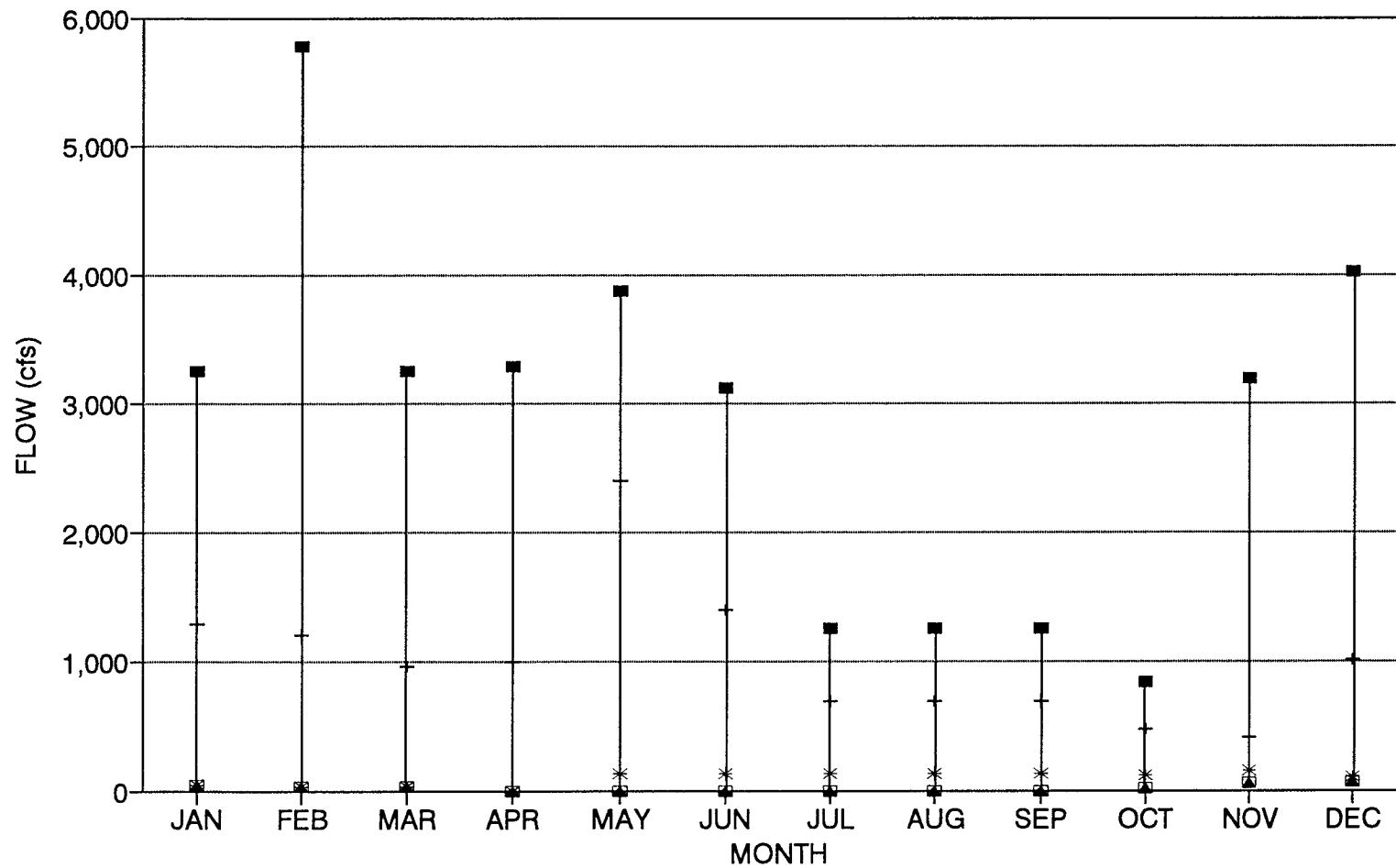
C-101615

FLOW INTO THE DELTA UNDER NO ACTION  
SIMULATION FROM 1921-1990 HYDROLOGY DATABASE



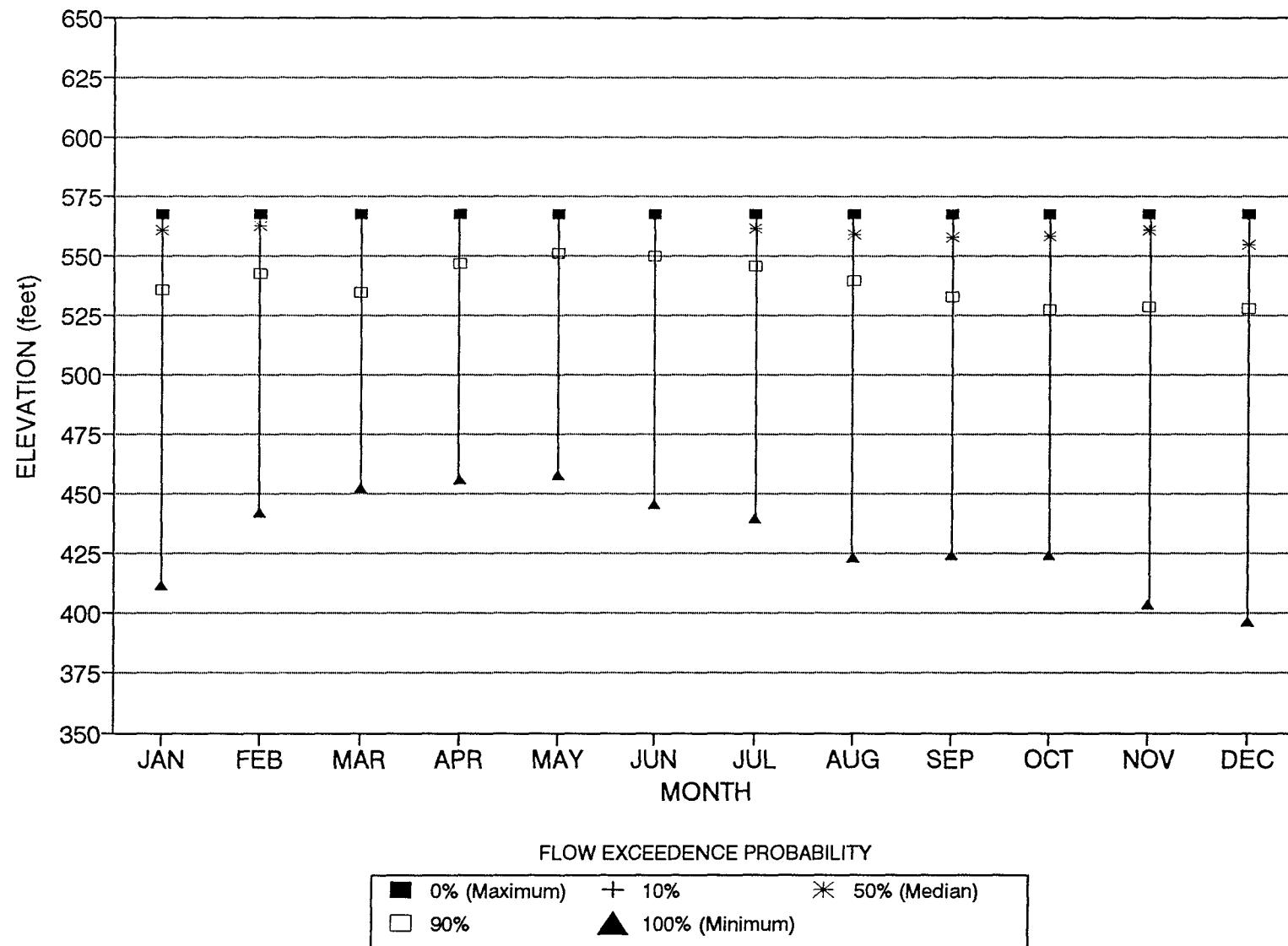
C - 1 0 1 6 1 6

FLOW INTO THE DELTA UNDER NO ACTION  
SIMULATION FROM 1921-1990 HYDROLOGY DATABASE



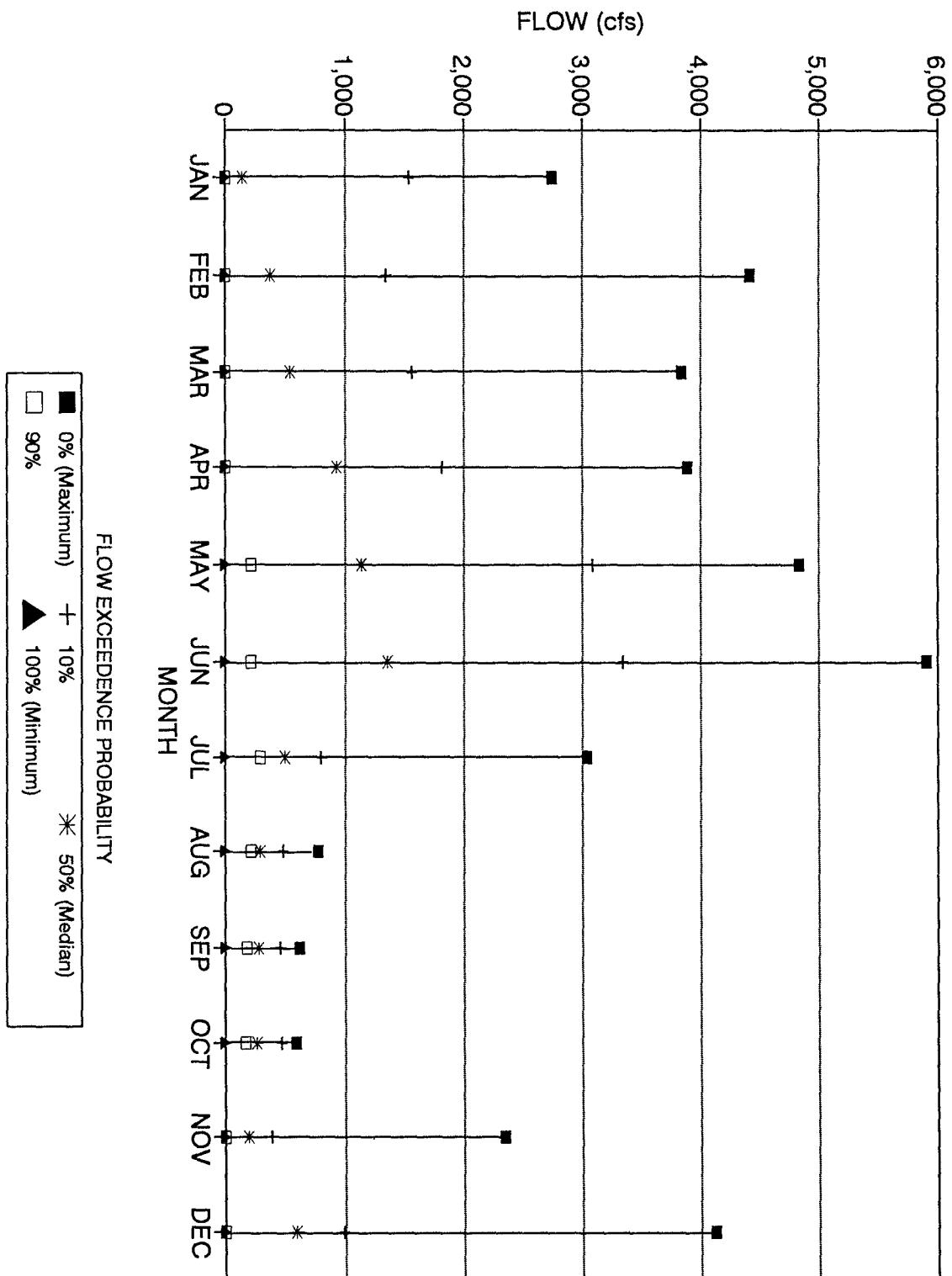
C - 1 0 1 6 1 7

PARDEE RESERVOIR ELEVATION UNDER CPI MAXIMUM DPI  
SIMULATION FROM 1921-1990 HYDROLOGY DATABASE



C-101618

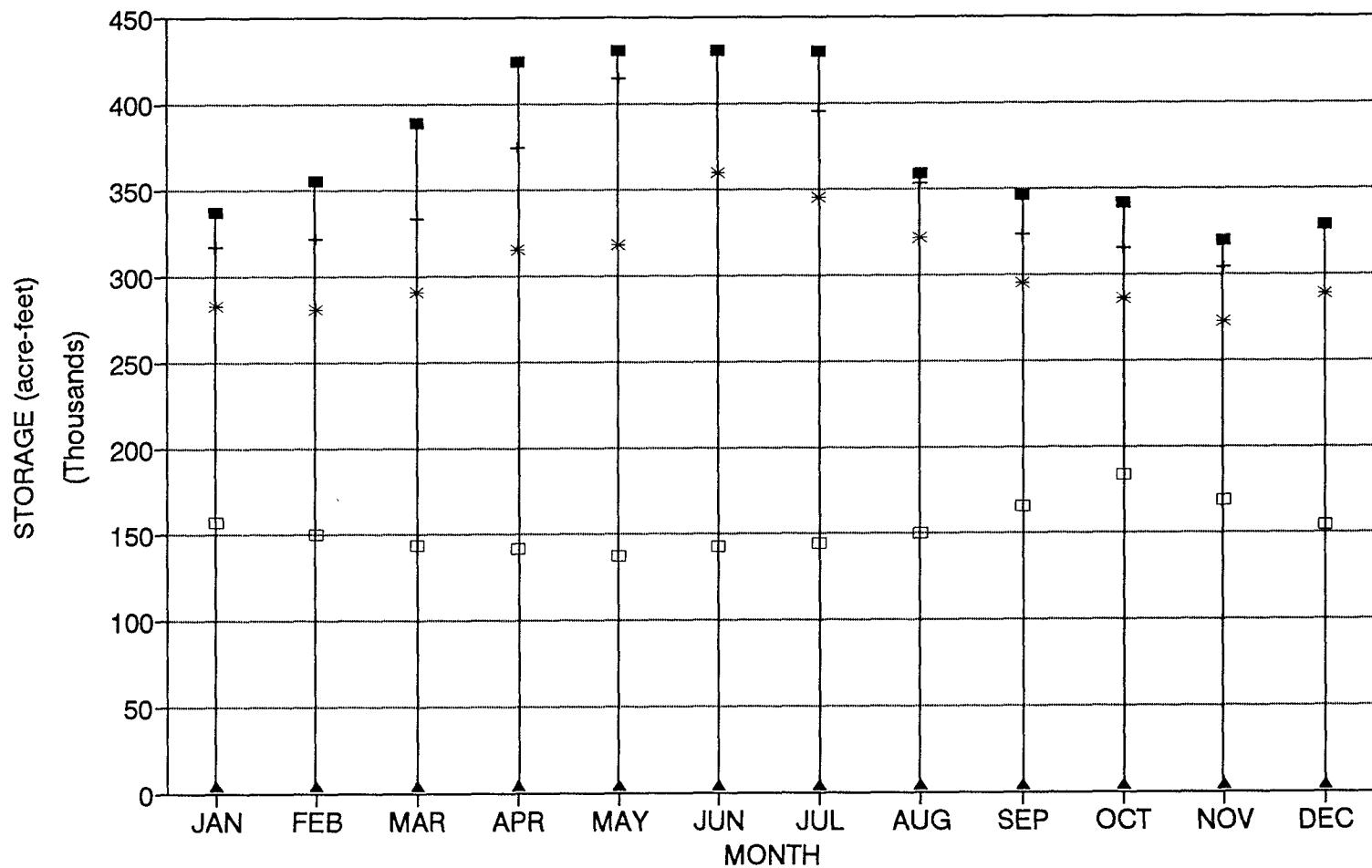
**PARDEE RELEASES UNDER X CPI MAXIMUM DMP  
SIMULATION FROM 1921-1990 HYDROLOGY DATABASE**



**C - 1 0 1 6 1 9**

C-101619

CAMANCHE RESERVOIR STORAGE UNDER X CPI MAXIMUM DMP  
SIMULATION FROM 1921-1990 HYDROLOGY DATABASE

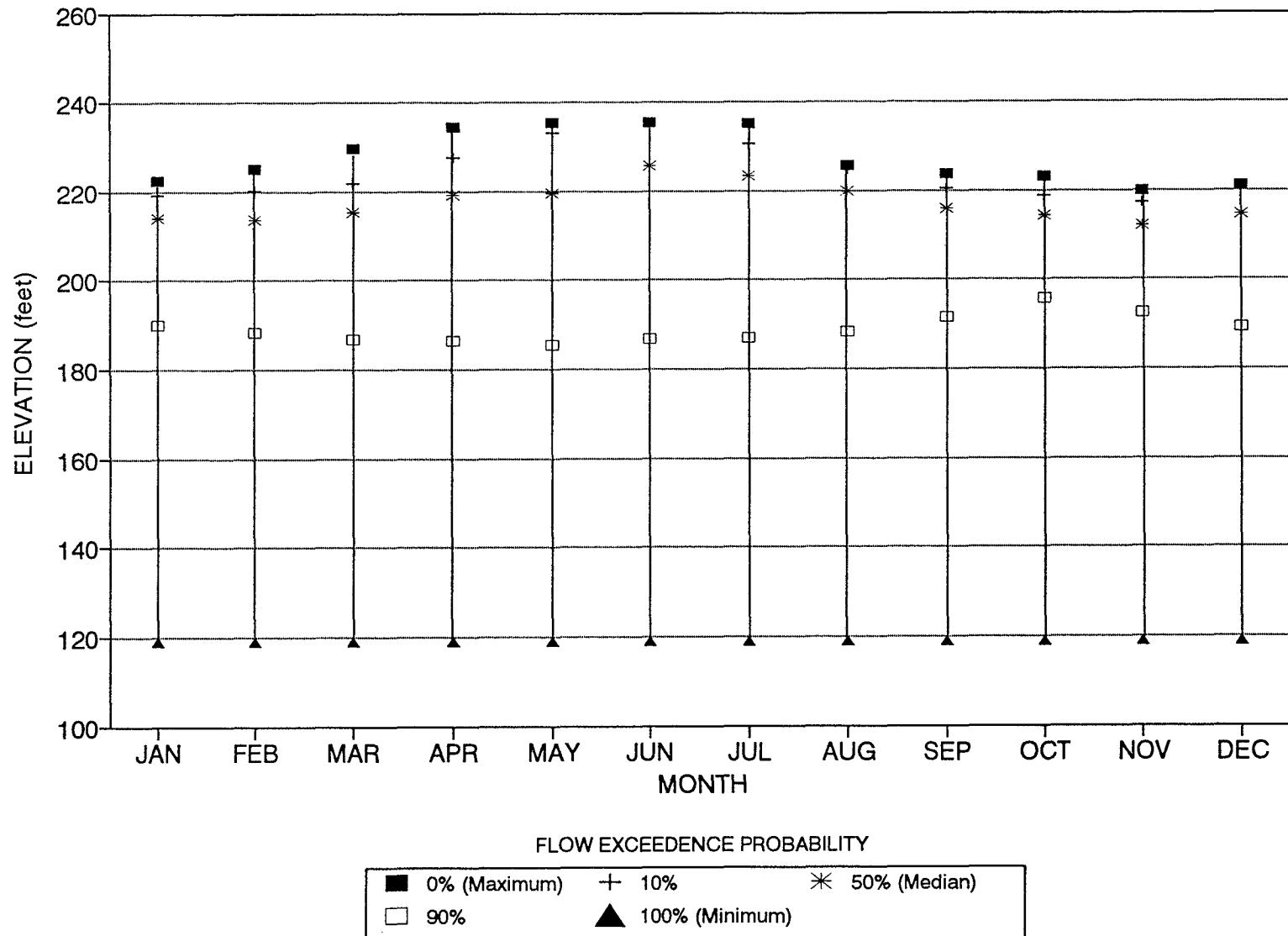


C - 1 0 1 6 2 0

## FLOW EXCEEDENCE PROBABILITY

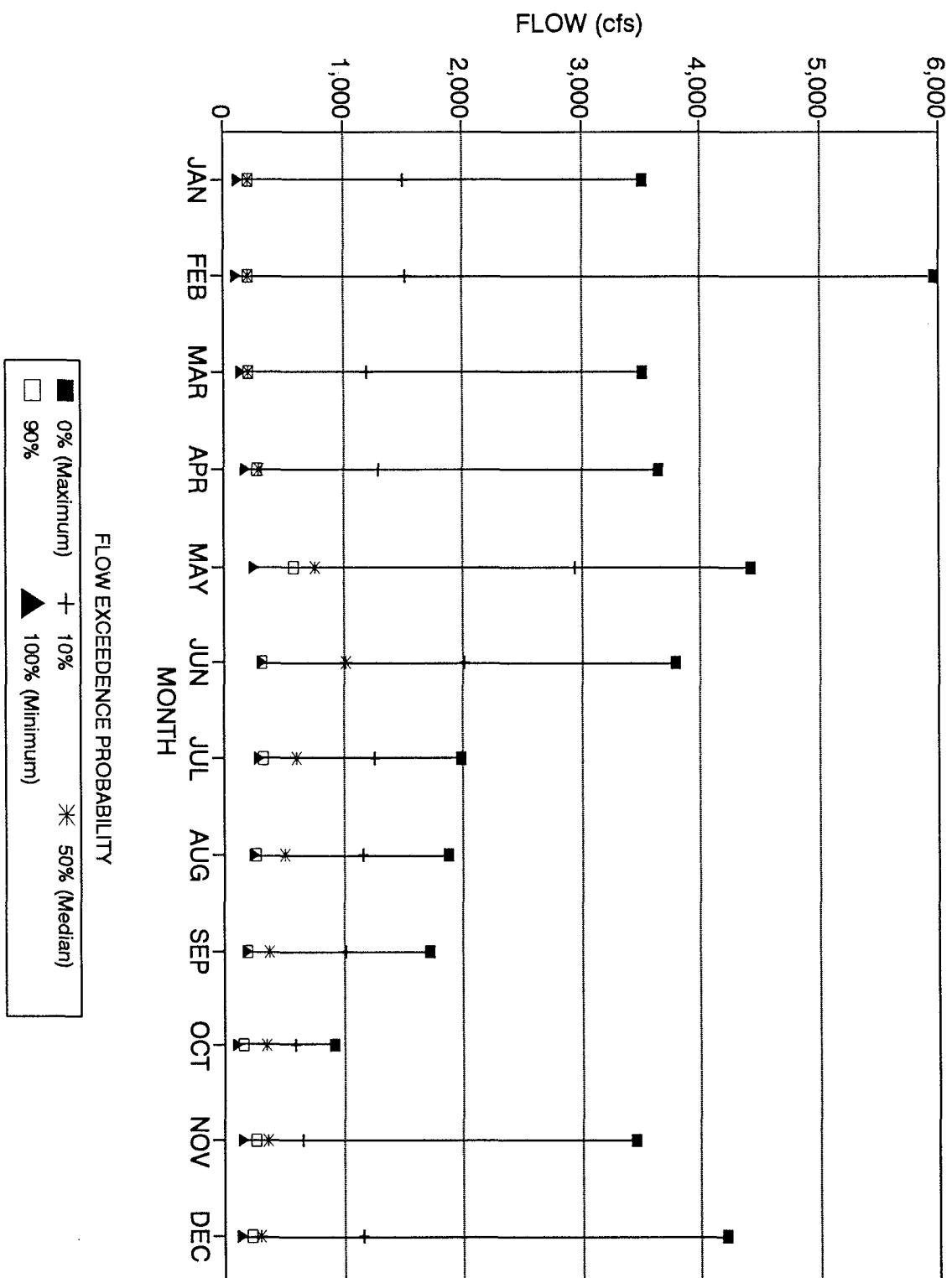
■ 0% (Maximum)	✚ 10%	* 50% (Median)
□ 90%	▲ 100% (Minimum)	

CAMANCHE RESERVOIR ELEVATION UNDER CPI MAXIMUM DPI  
SIMULATION FROM 1921-1990 HYDROLOGY DATABASE



C - 1 0 1 6 2 1

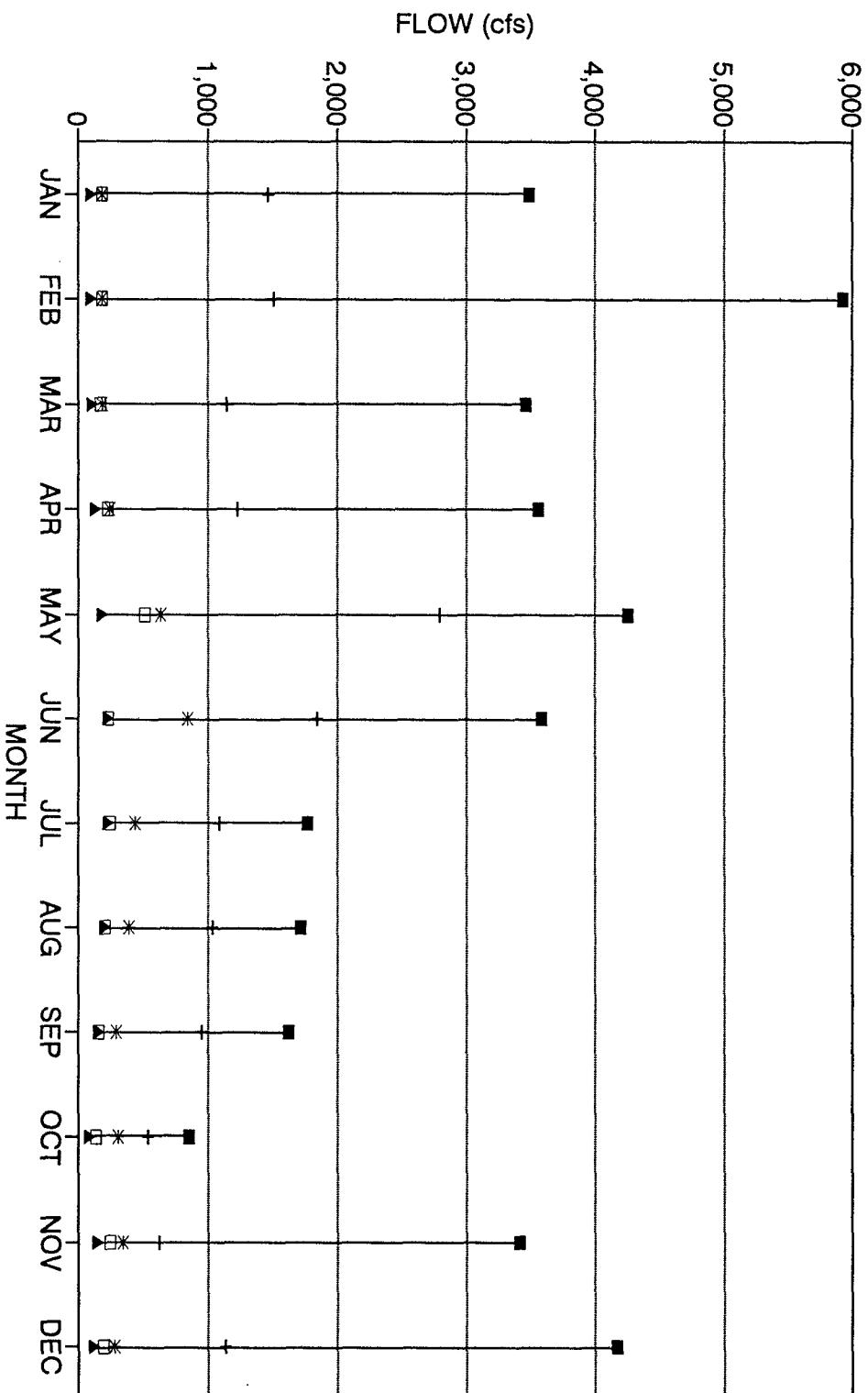
CAMANCHE RELEASES UNDER X CPI MAXIMUM DMP  
SIMULATION FROM 1921-1990 HYDROLOGY DATABASE



C - 1 0 1 6 2 2

C-101622

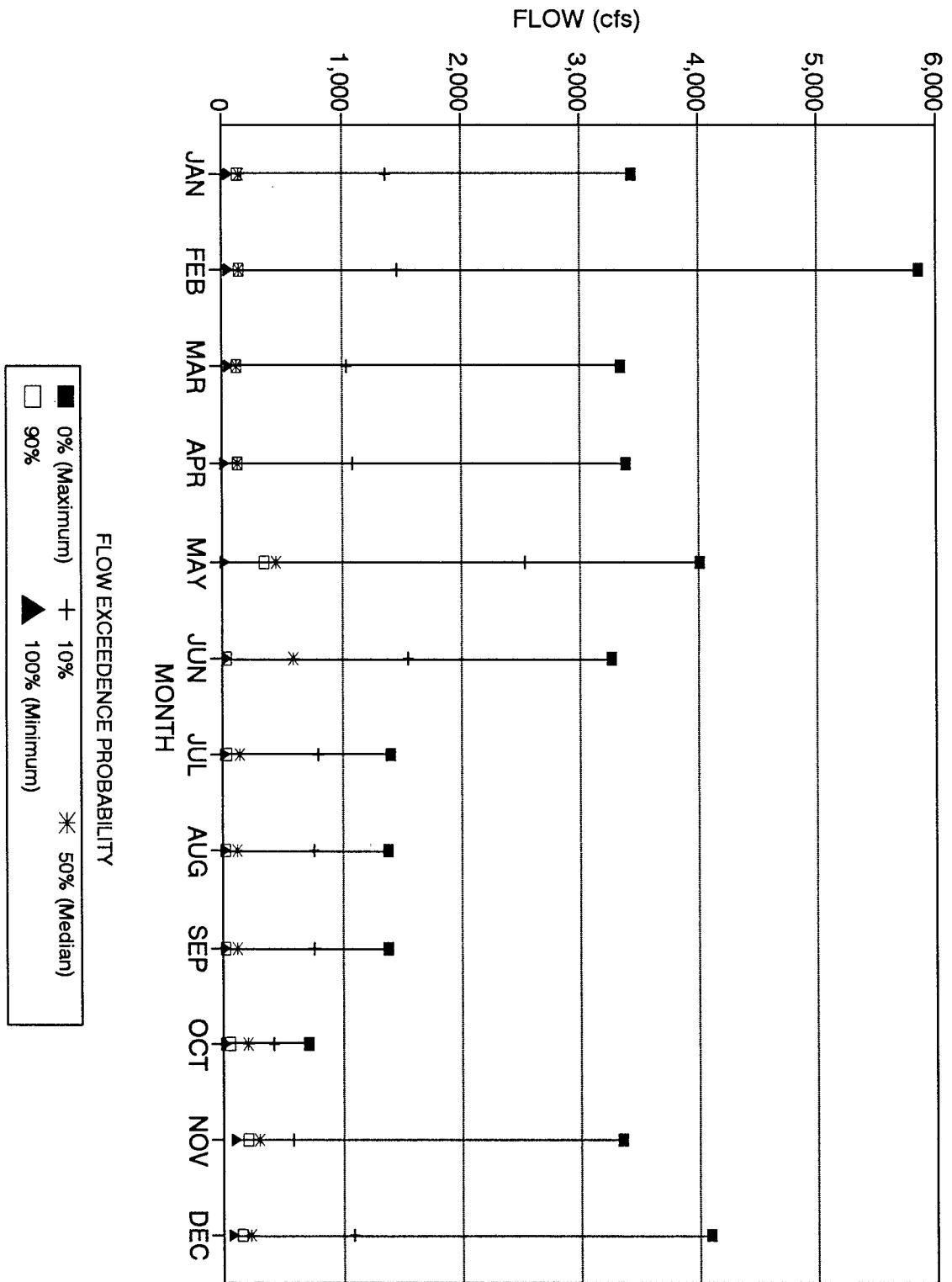
**FLOW AT VICTOR UNDER X CPI MAXIMUM DMP  
SIMULATION FROM 1921-1990 HYDROLOGY DATABASE**



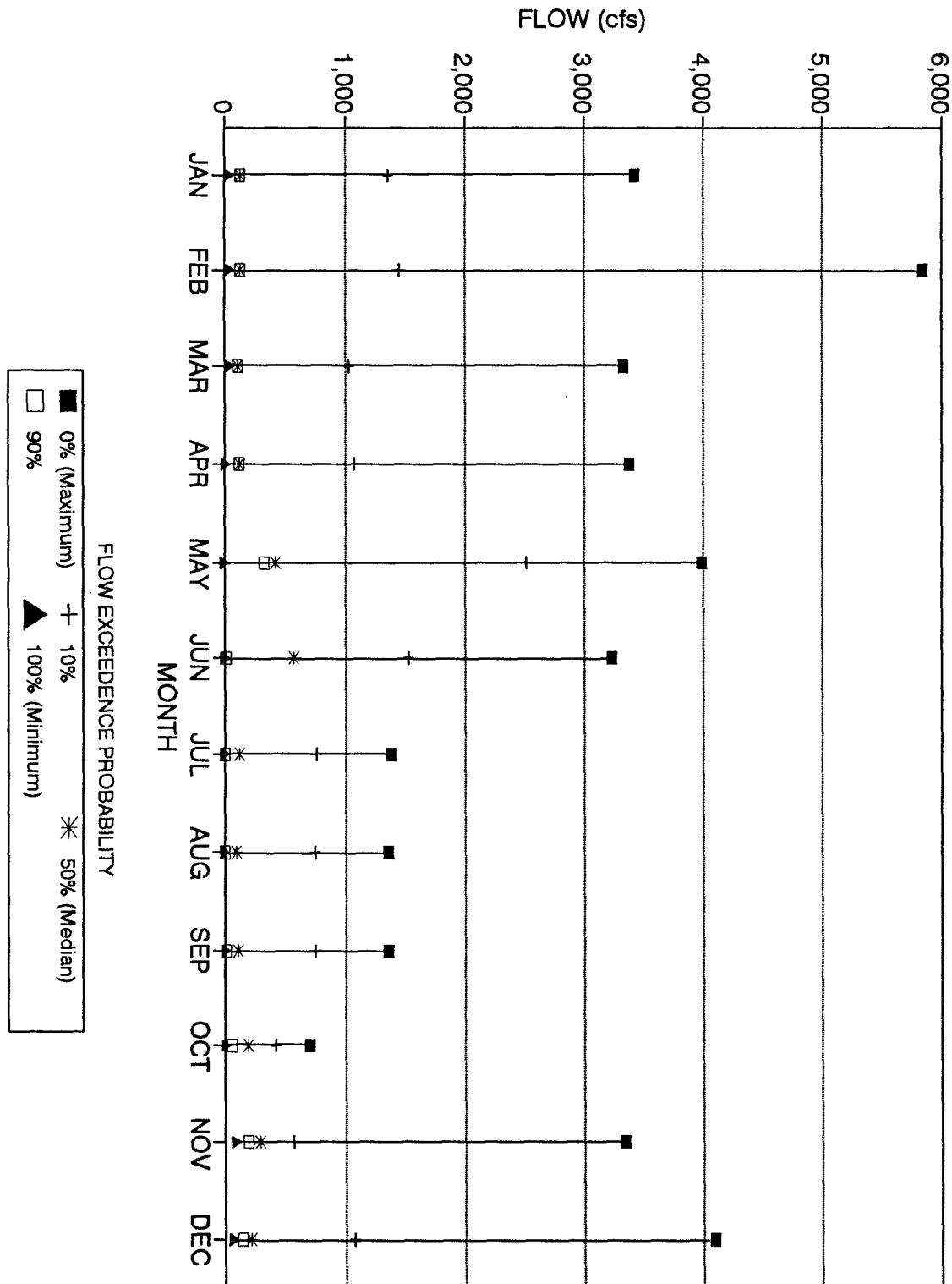
C - 1 0 1 6 2 3

C-101623

FLOW BELOW LAKE LODI UNDER X CPI MAXIMUM DMP  
SIMULATION FROM 1921-1990 HYDROLOGY DATABASE



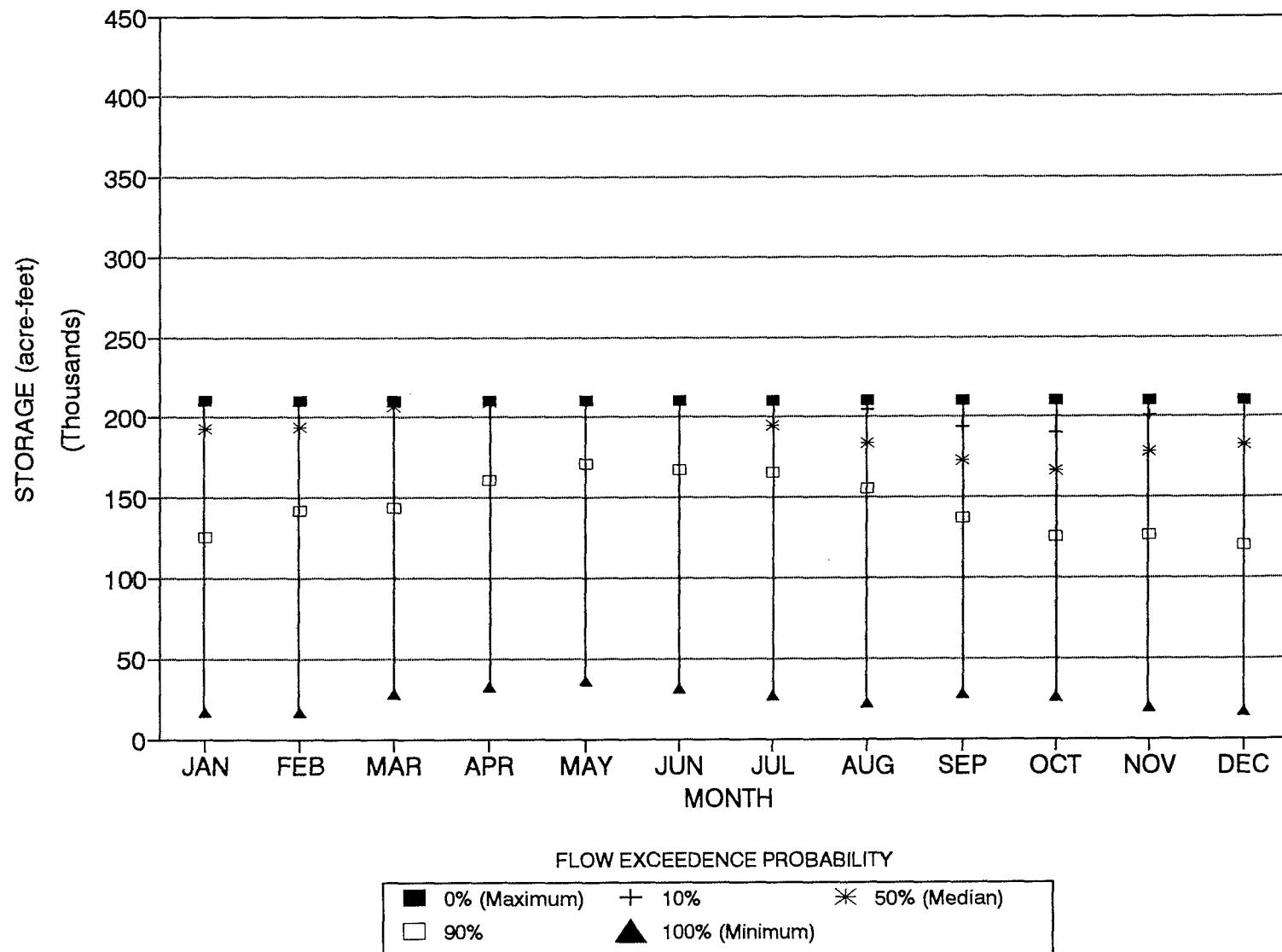
**FLOW INTO THE DELTA UNDER X CPI MAXIMUM DMP  
SIMULATION FROM 1921-1990 HYDROLOGY DATABASE**



C - 1 0 1 6 2 5

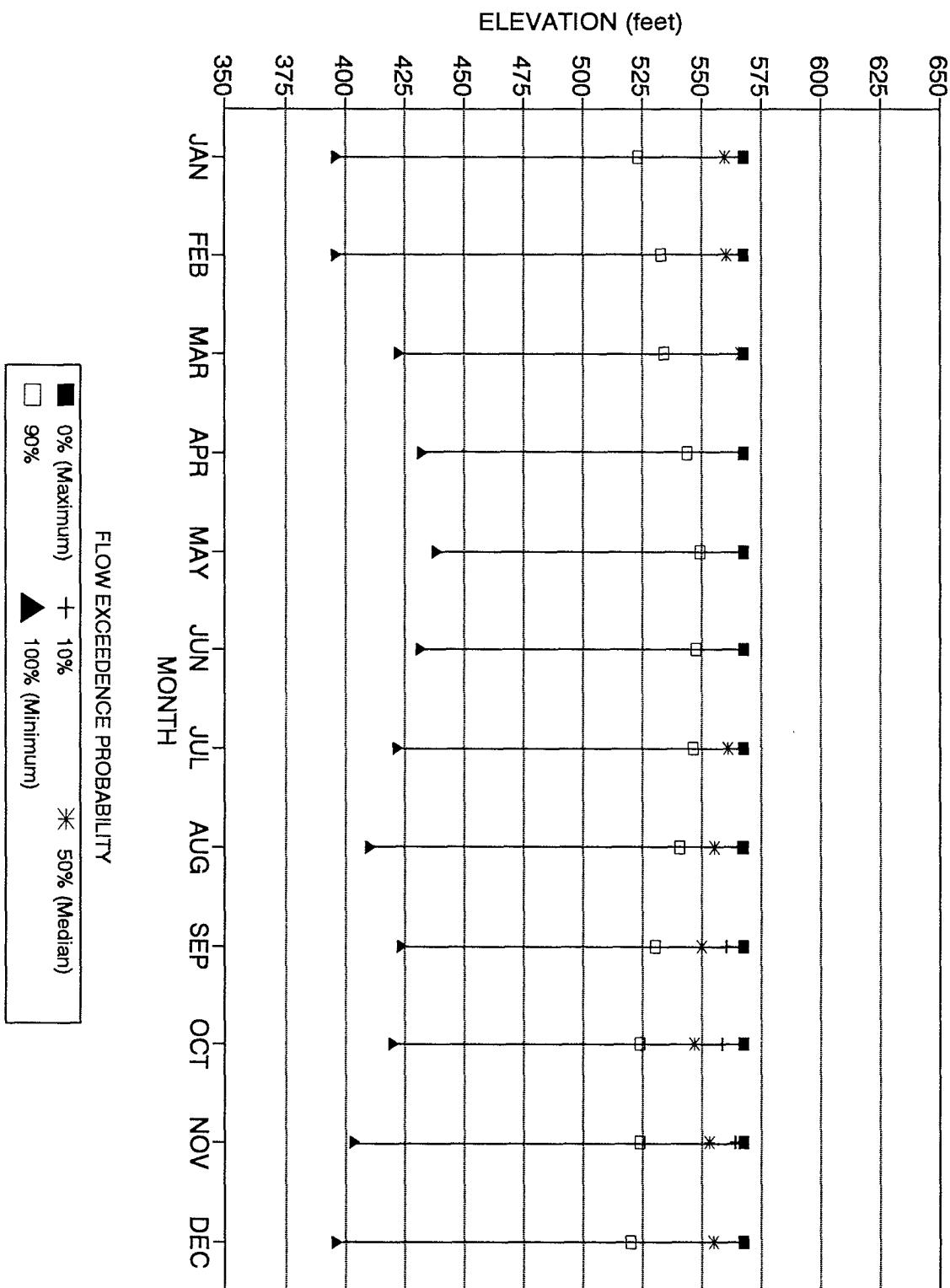
C-101625

PARDEE RESERVOIR STORAGE UNDER CPII - GROUNDWATER  
SIMULATION FROM 1921-1990 HYDROLOGY DATABASE



C-101626

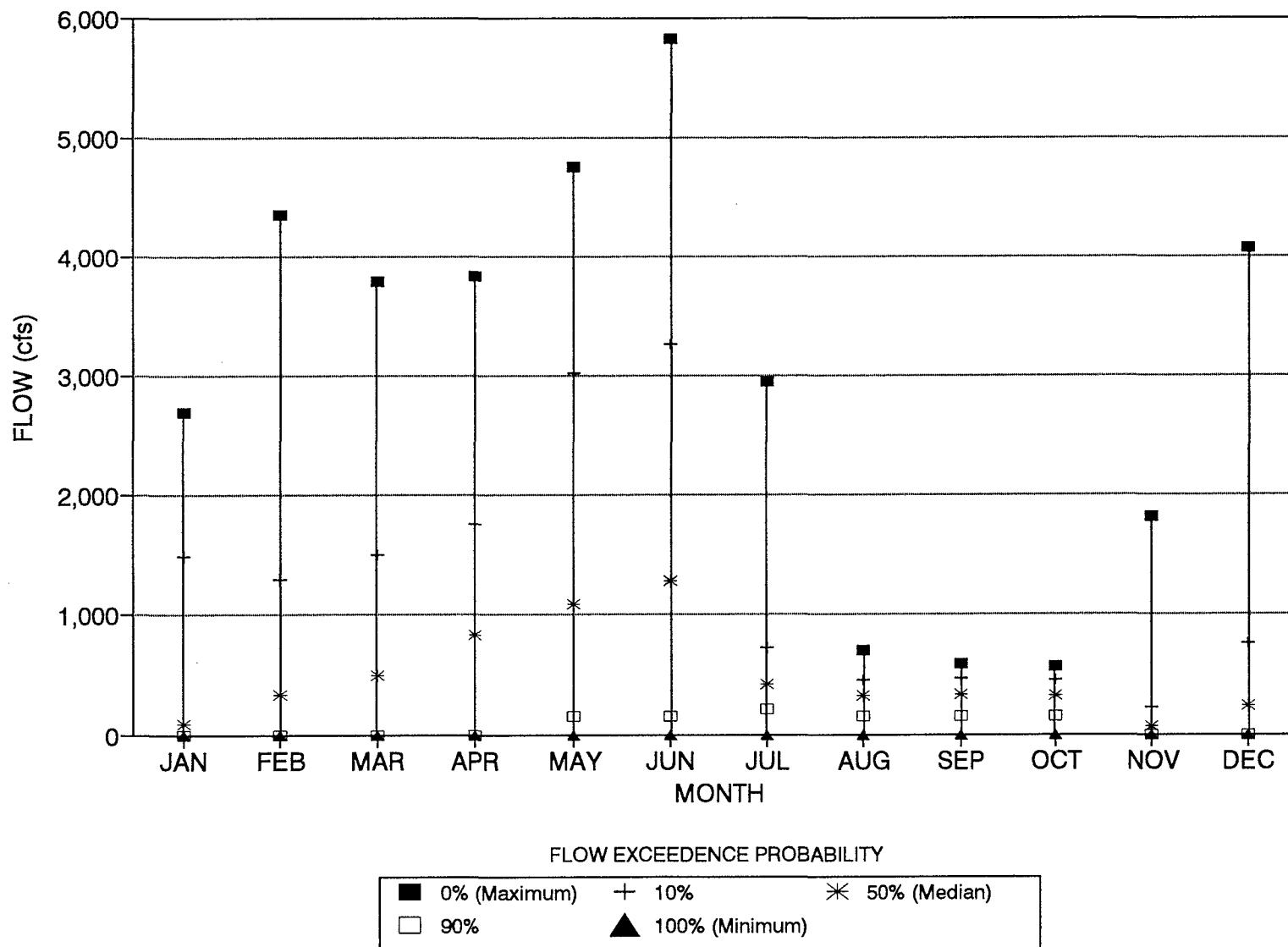
**PARDEE RESERVOIR ELEVATION UNDER CPII - GROUNDWATER  
SIMULATION FROM 1921-1990 HYDROLOGY DATABASE**



C - 1 0 1 6 2 7

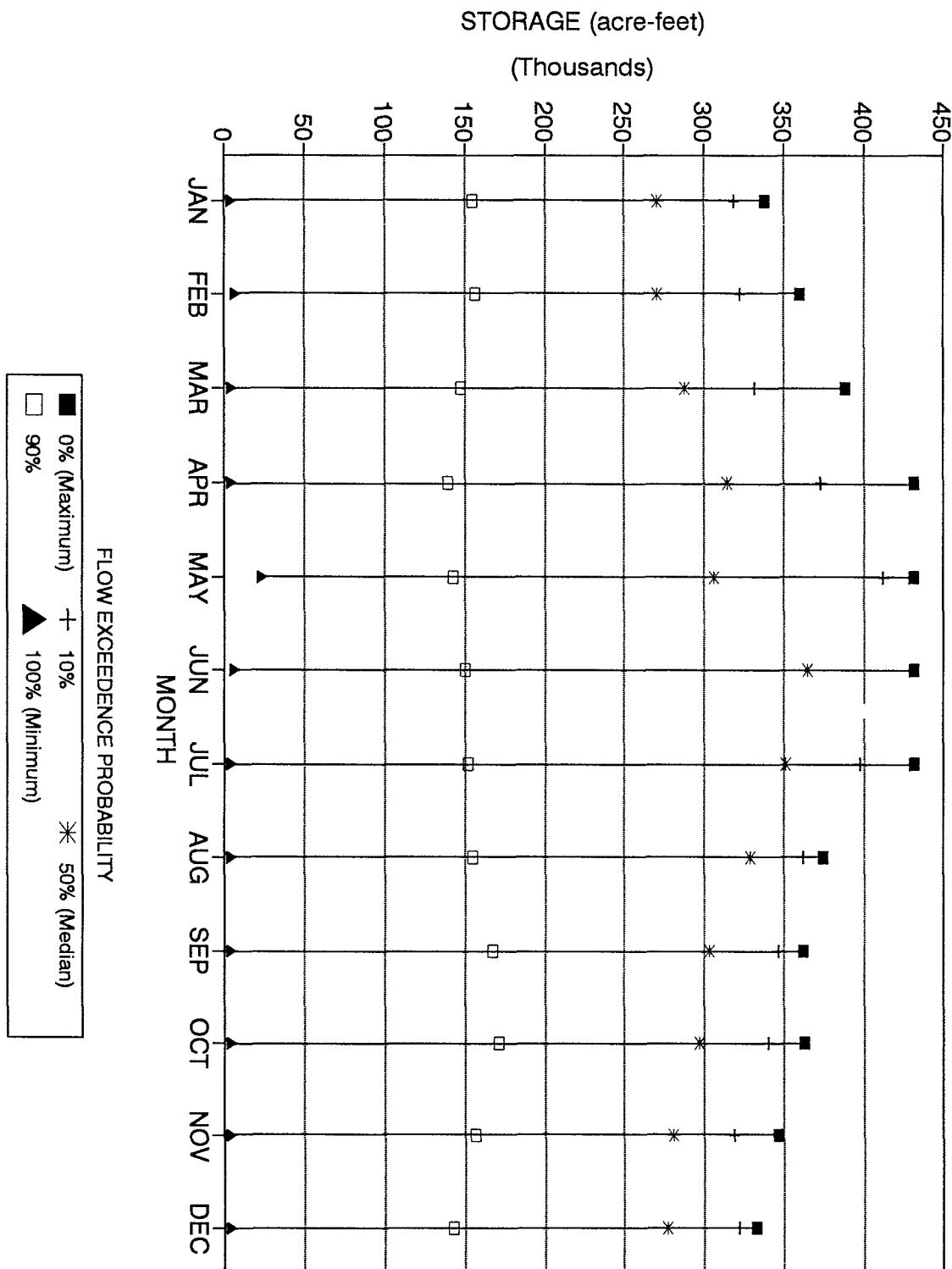
C-101627

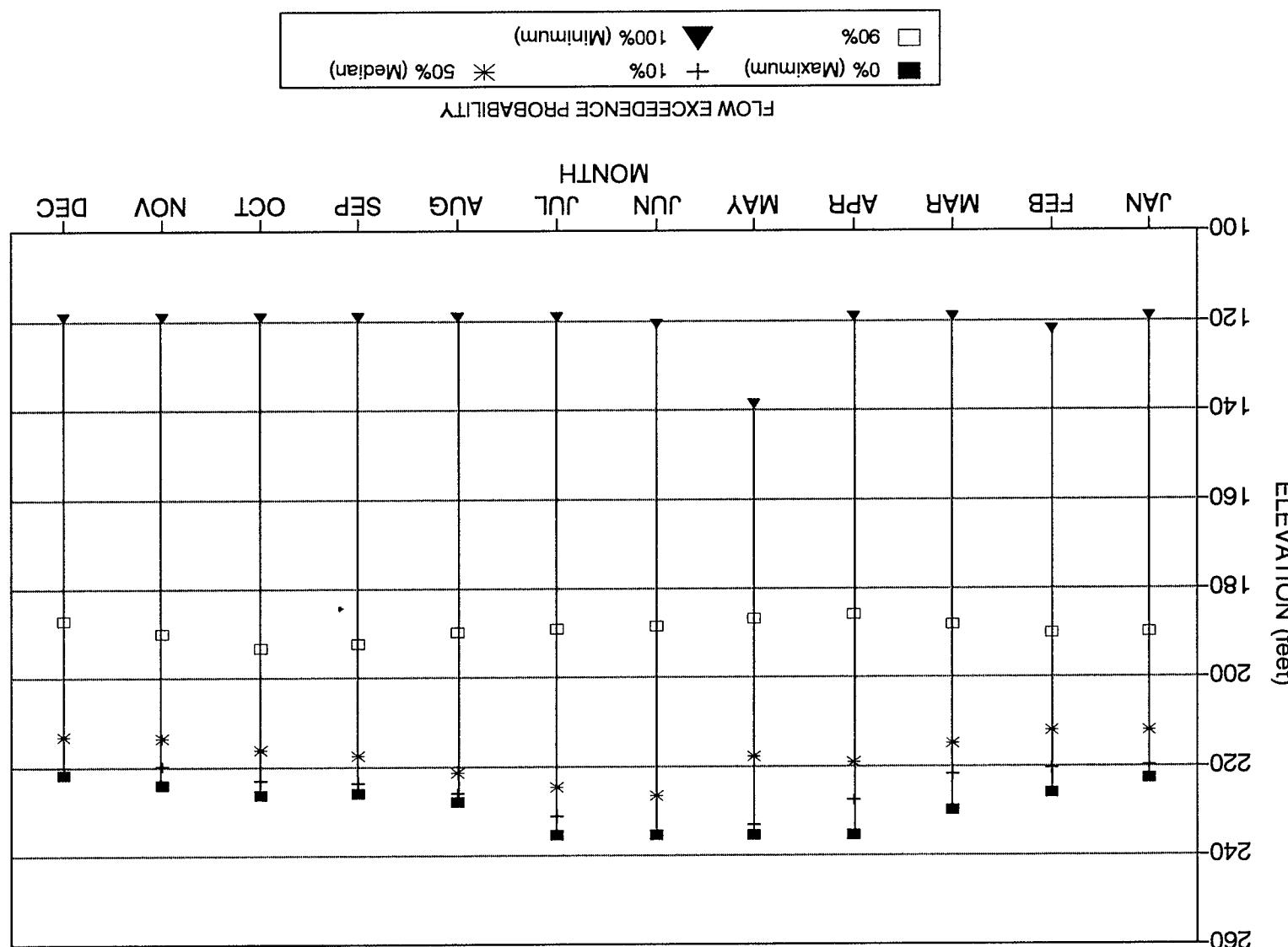
PARDEE RELEASES UNDER CPII - GROUNDWATER  
SIMULATION FROM 1921-1990 HYDROLOGY DATABASE



C-101628

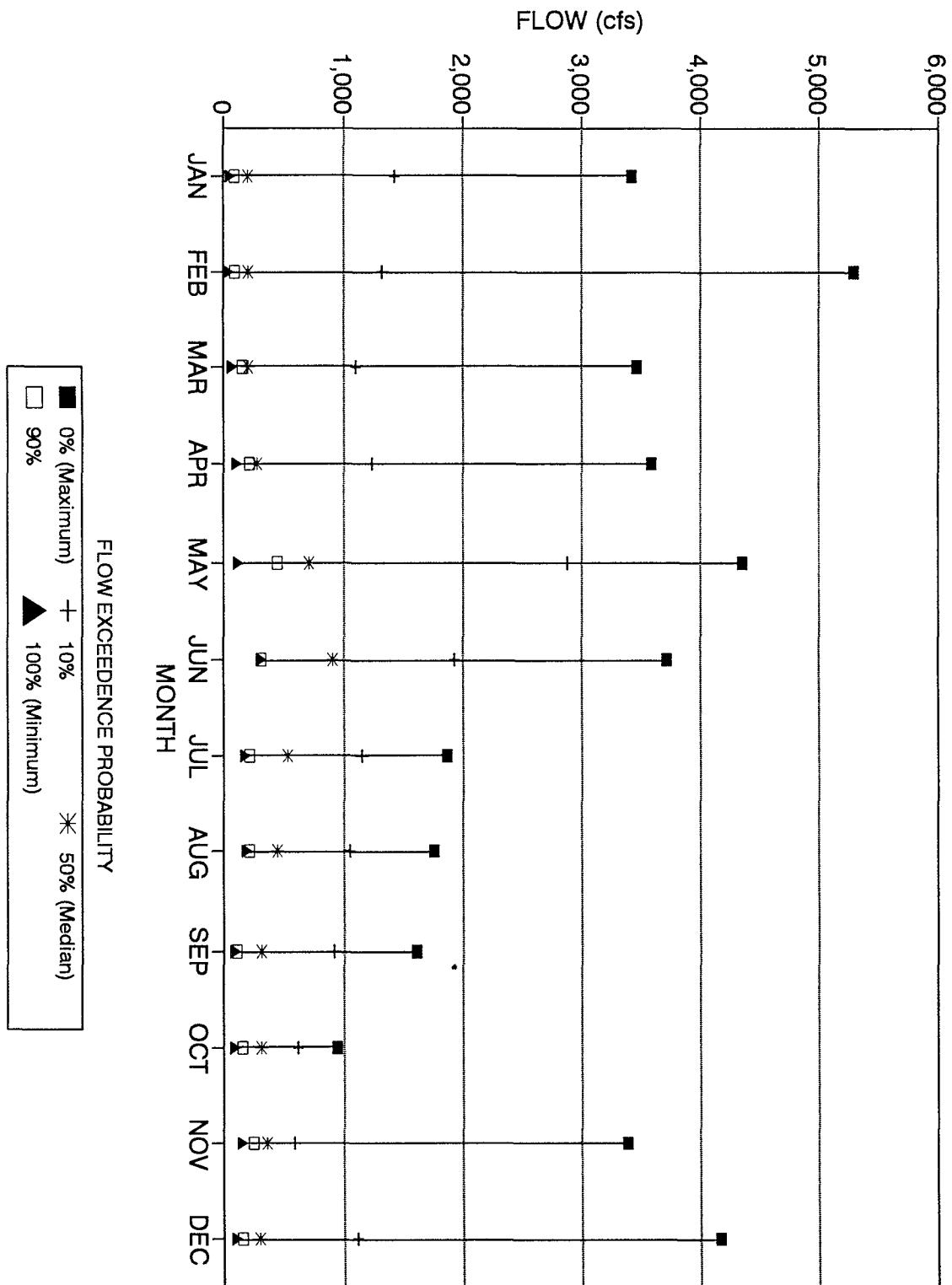
CAMANCHE RESERVOIR STORAGE UNDER CPI - GROUNDWATER  
SIMULATION FROM 1921-1990 HYDROLOGY DATABASE





SIMULATION FROM 1921-1990 HYDROLOGY DATABASE  
CAMANCHE RESERVOIR ELEVATION UNDER CPII - GROUNDWATER

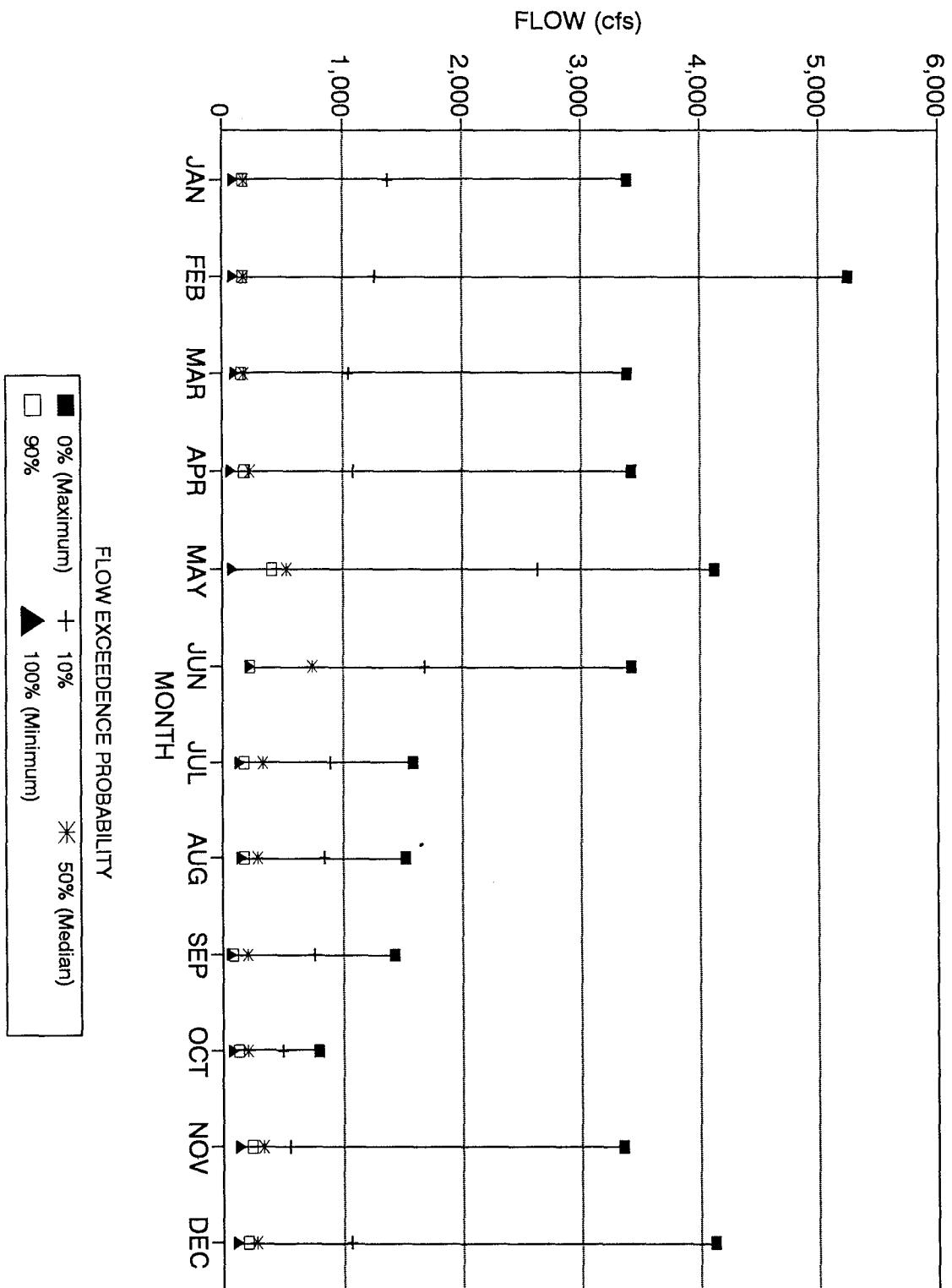
CAMANCHE RELEASES UNDER CPI - GROUNDWATER  
SIMULATION FROM 1921-1990 HYDROLOGY DATABASE



C - 1 0 1 6 3 1

C-101631

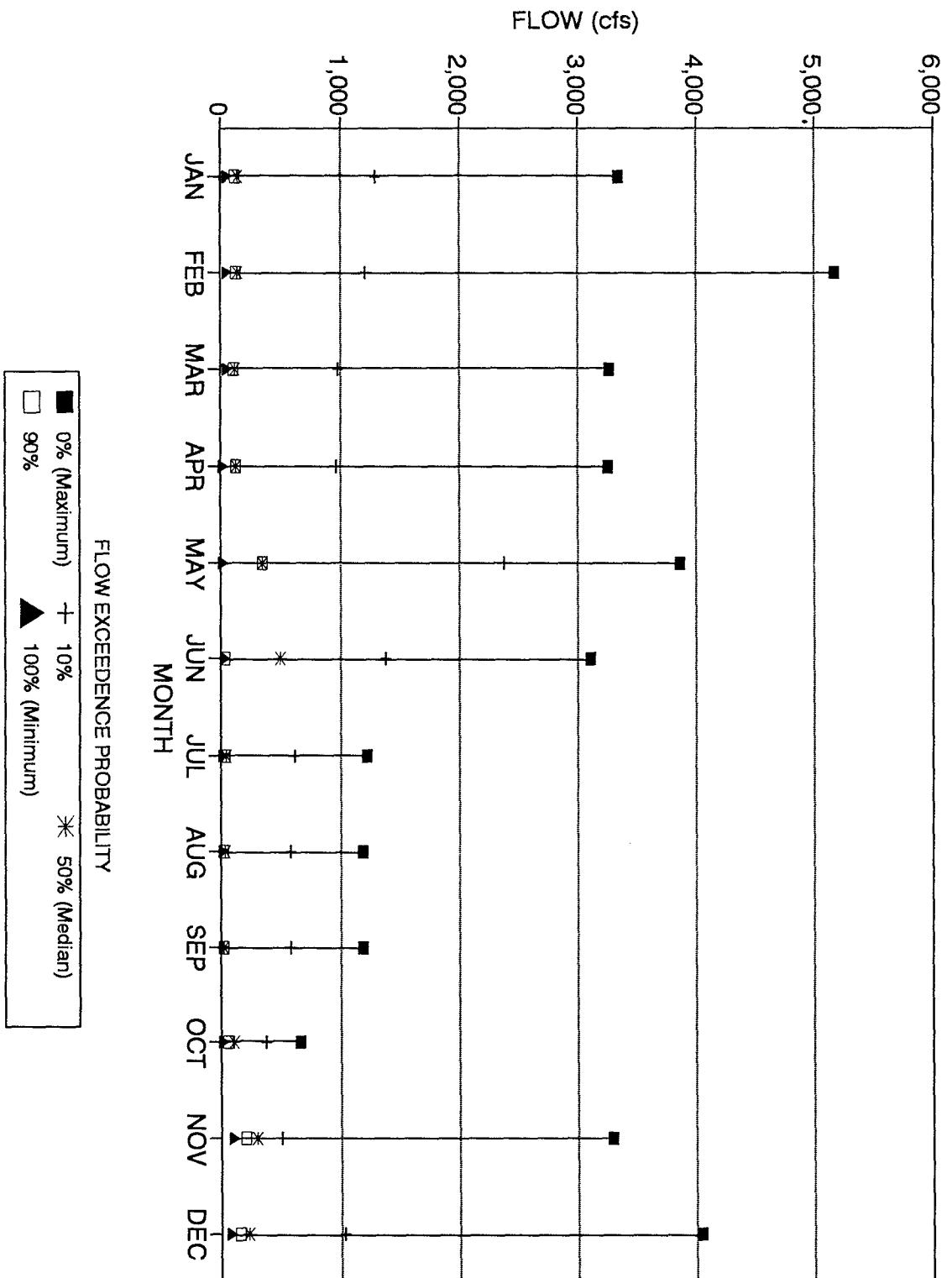
**FLOW AT VICTOR UNDER CPII - GROUNDWATER  
SIMULATION FROM 1921-1990 HYDROLOGY DATABASE**



C - 1 0 1 6 3 2

C-101632

FLOW BELOW LAKE LODI UNDER CPI - GROUNDWATER  
SIMULATION FROM 1921-1990 HYDROLOGY DATABASE

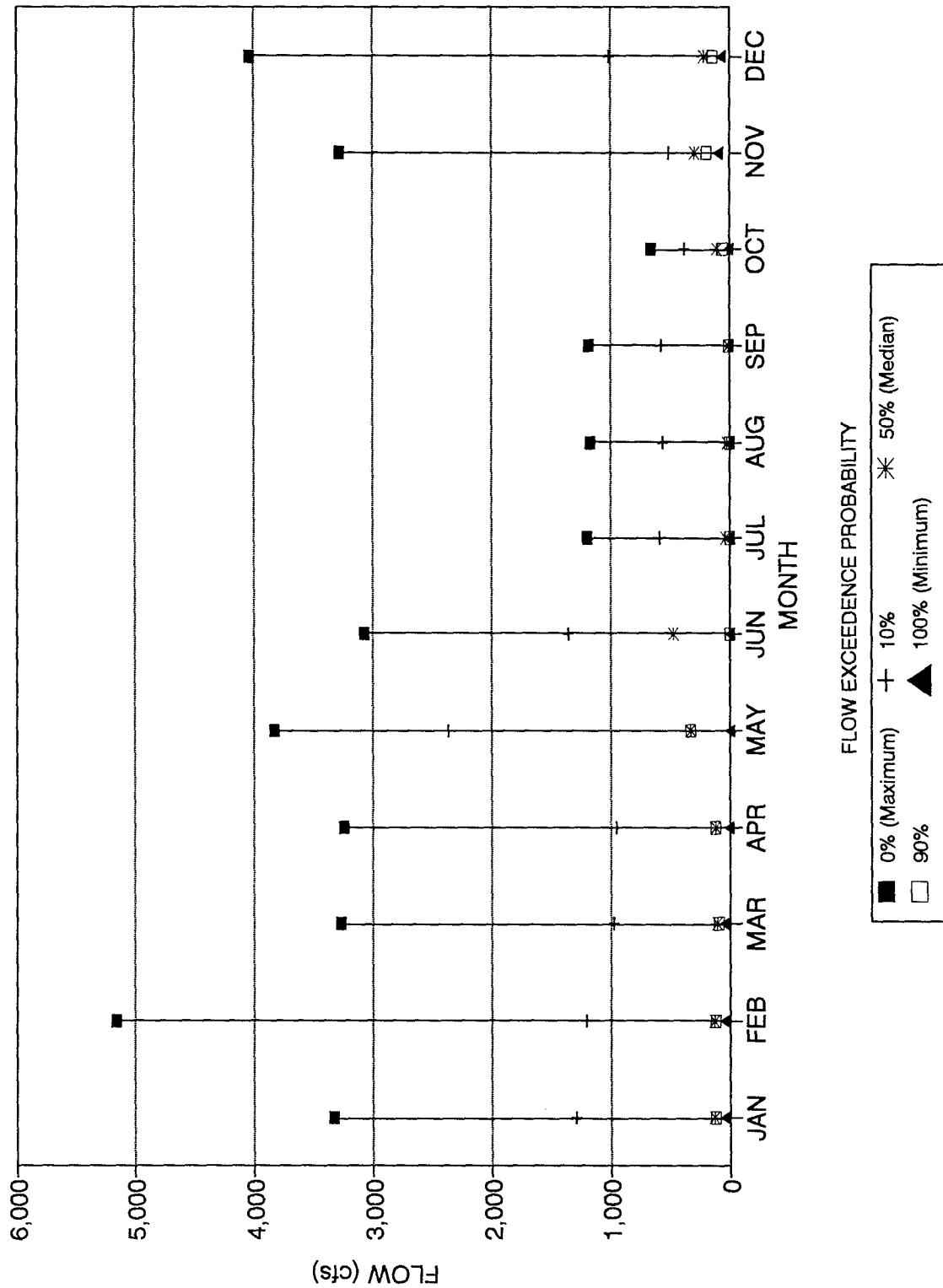


C - 1 0 1 6 3 3

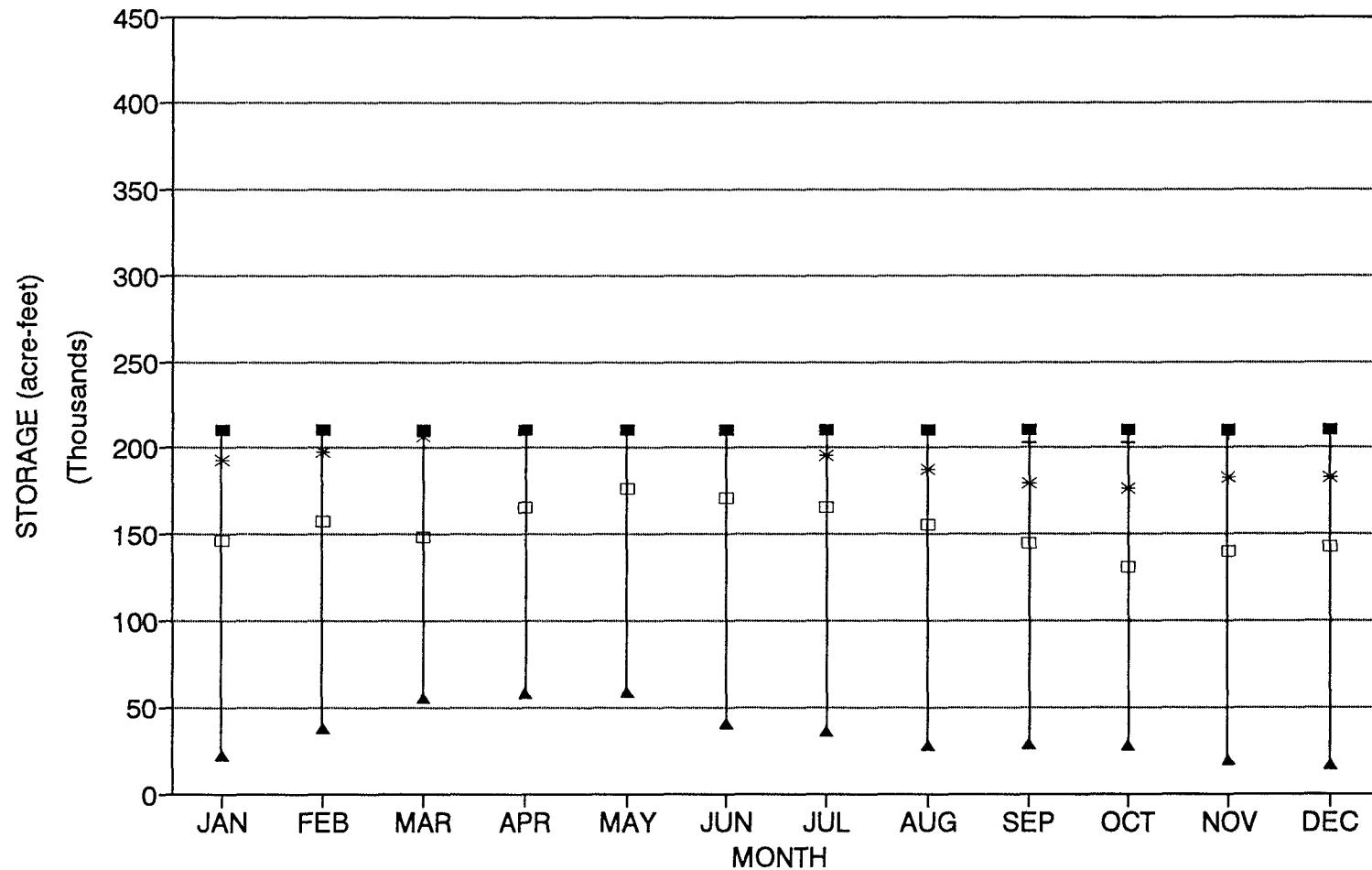
C-101633

C - 1 0 1 6 3 4

FLOW INTO THE DELTA UNDER CPII - GROUNDWATER  
SIMULATION FROM 1921-1990 HYDROLOGY DATABASE



PARDEE RESERVOIR STORAGE UNDER B' CPIII DELTA DIVERSION  
SIMULATION FROM 1921-1990 HYDROLOGY DATABASE

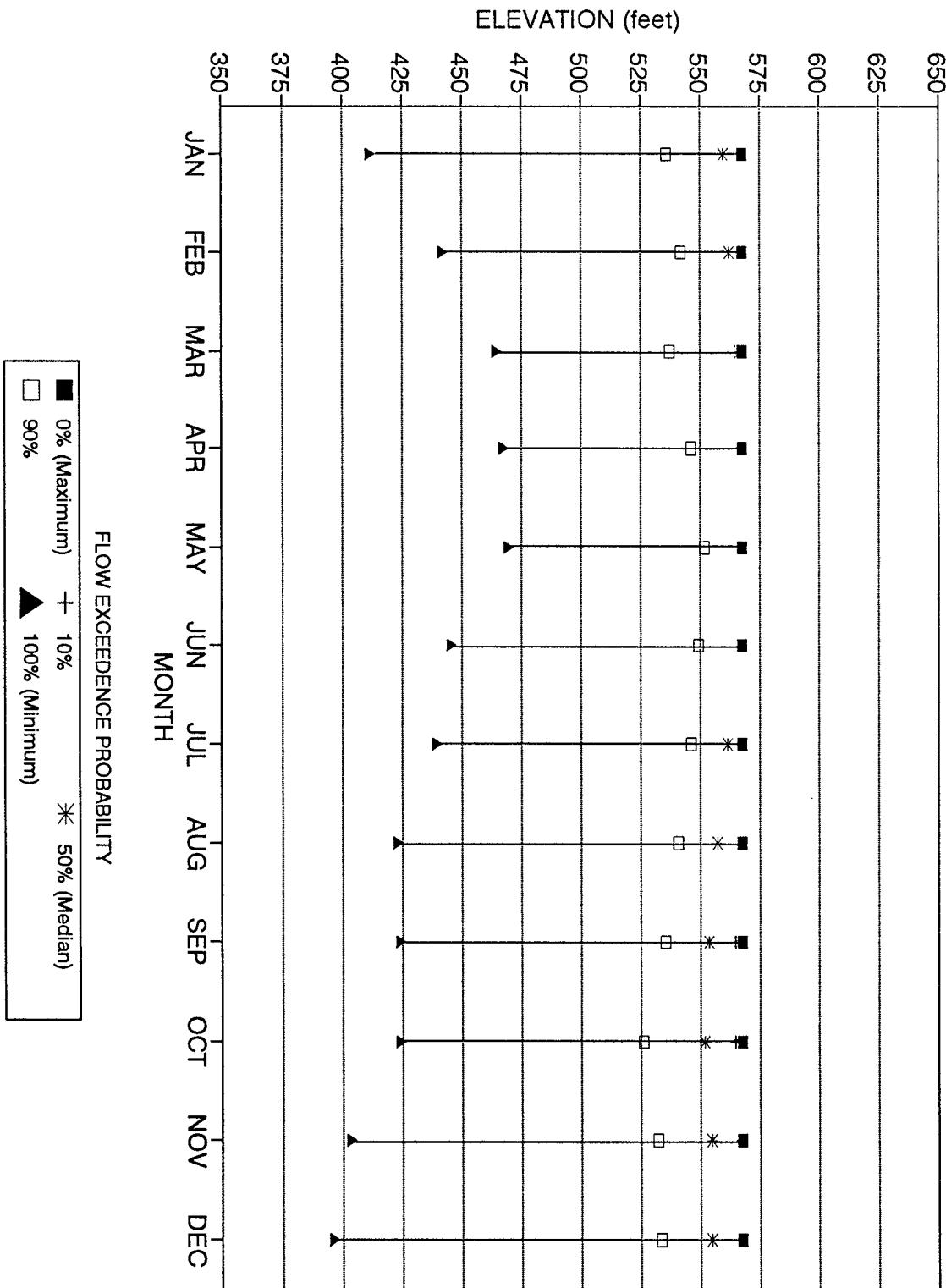


## FLOW EXCEEDENCE PROBABILITY

- |                |                  |                |
|----------------|------------------|----------------|
| ■ 0% (Maximum) | + 10%            | * 50% (Median) |
| □ 90%          | ▲ 100% (Minimum) |                |

C - 1 0 1 6 3 5

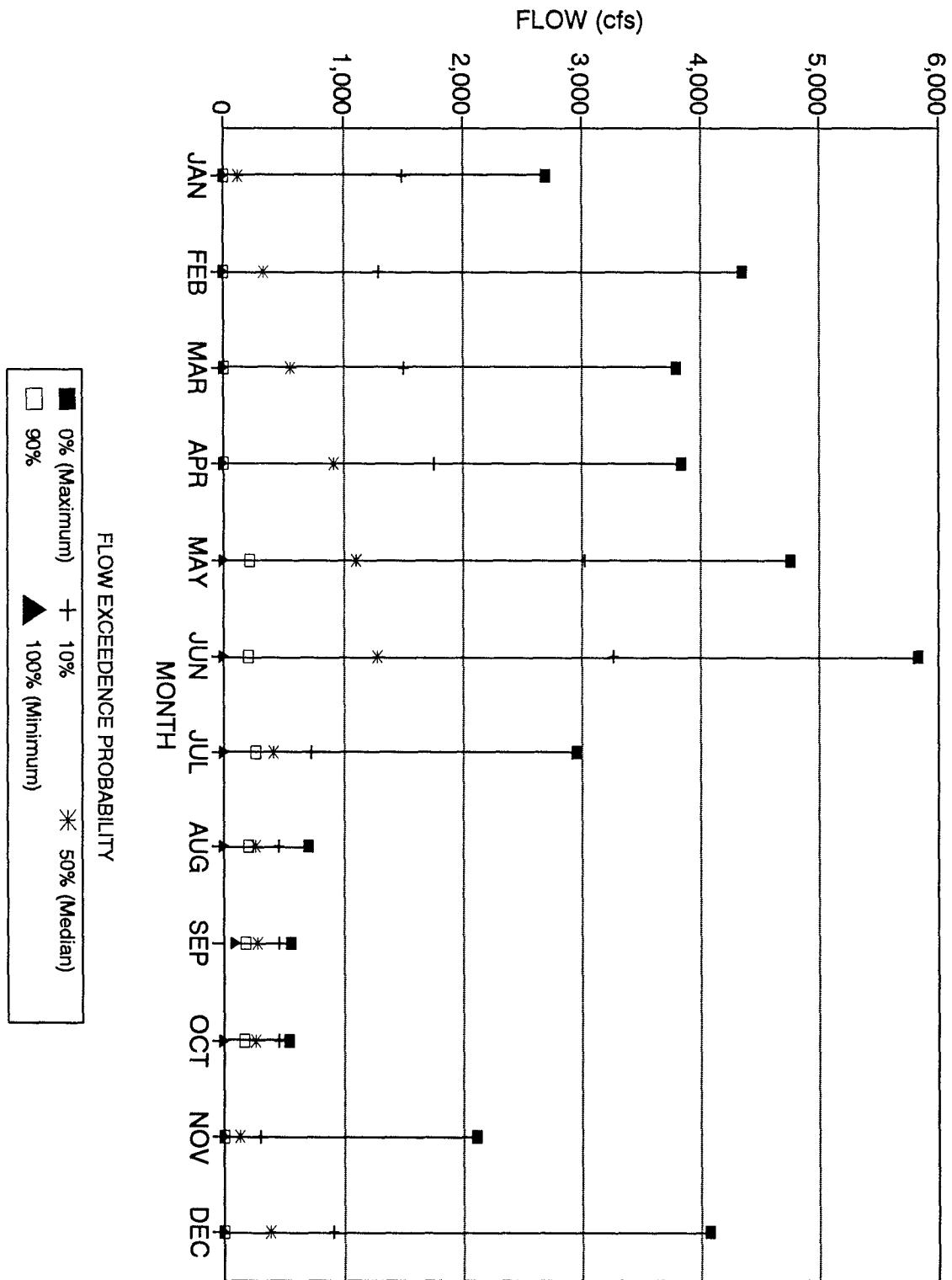
**PARDEE RESERVOIR ELEVATION UNDER CPIII DELTA DIVERSION  
SIMULATION FROM 1921-1990 HYDROLOGY DATABASE**



**C - 1 0 1 6 3 6**

C-101636

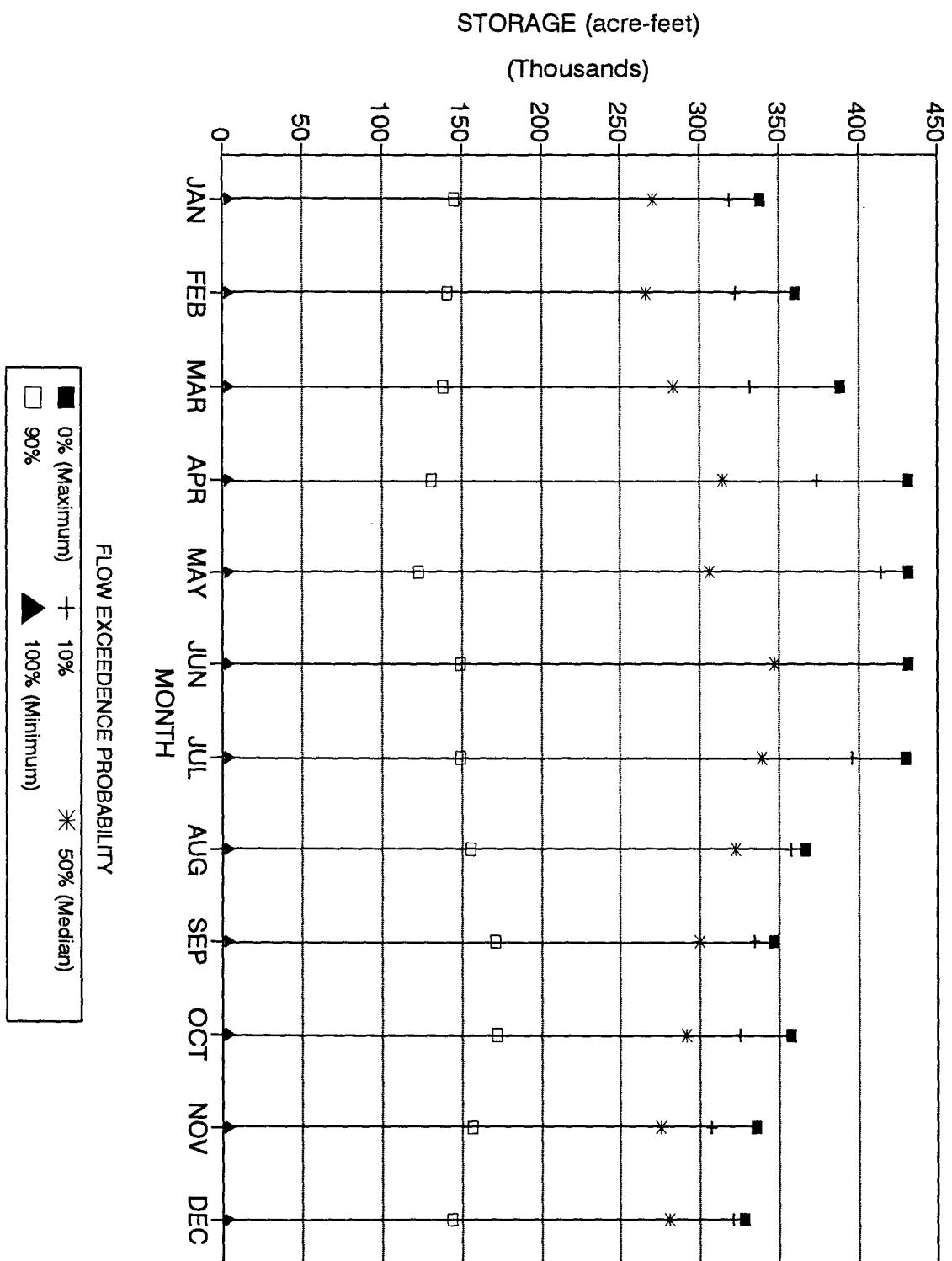
PARDEE RELEASES UNDER B' CPIII DELTA DIVERSION  
SIMULATION FROM 1921-1990 HYDROLOGY DATABASE



C - 1 0 1 6 3 7

C-101637

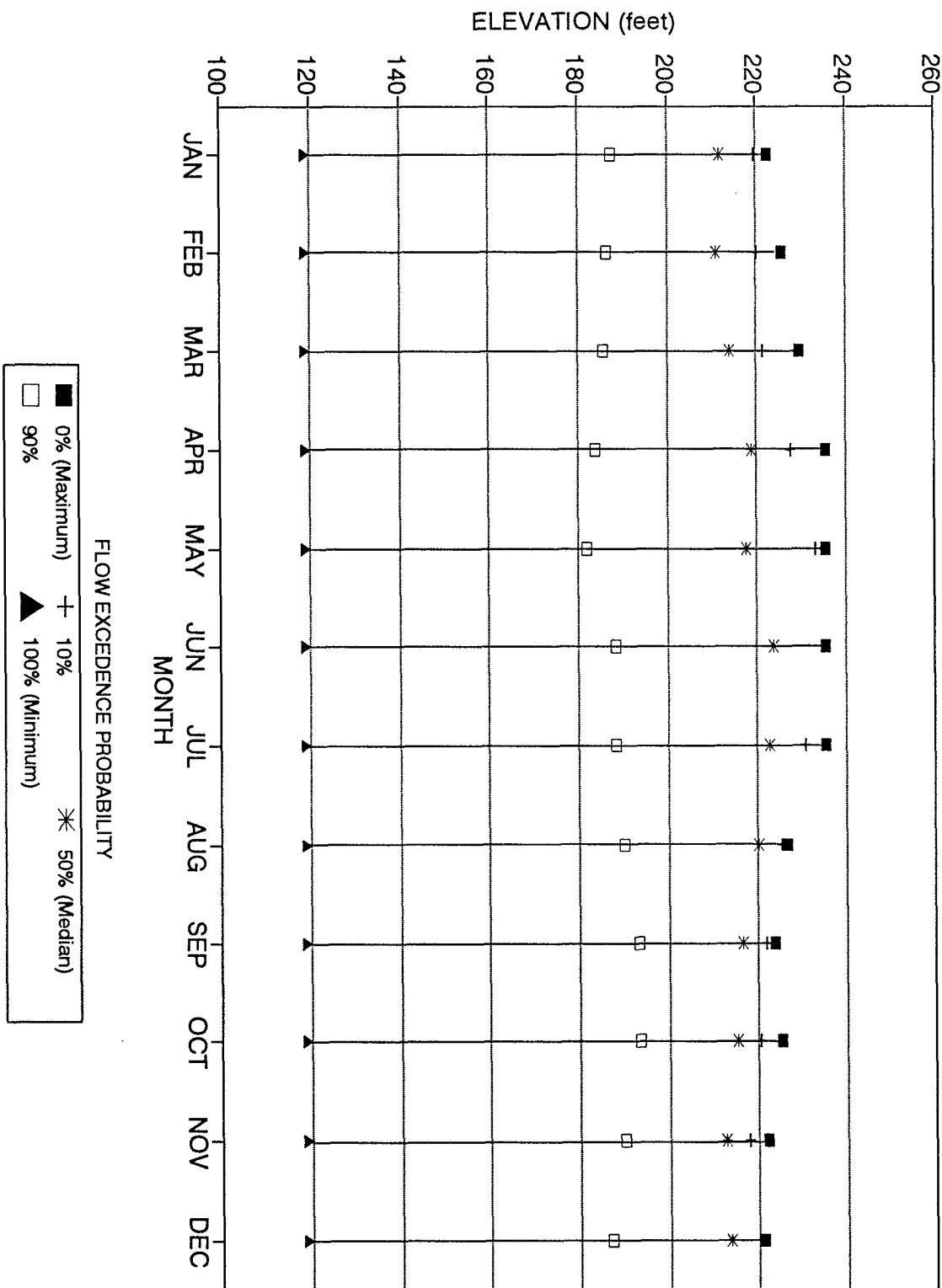
CAMANCHE RESERVOIR STORAGE UNDER B' CPIII DELTA DIVERSION  
SIMULATION FROM 1921-1990 HYDROLOGY DATABASE



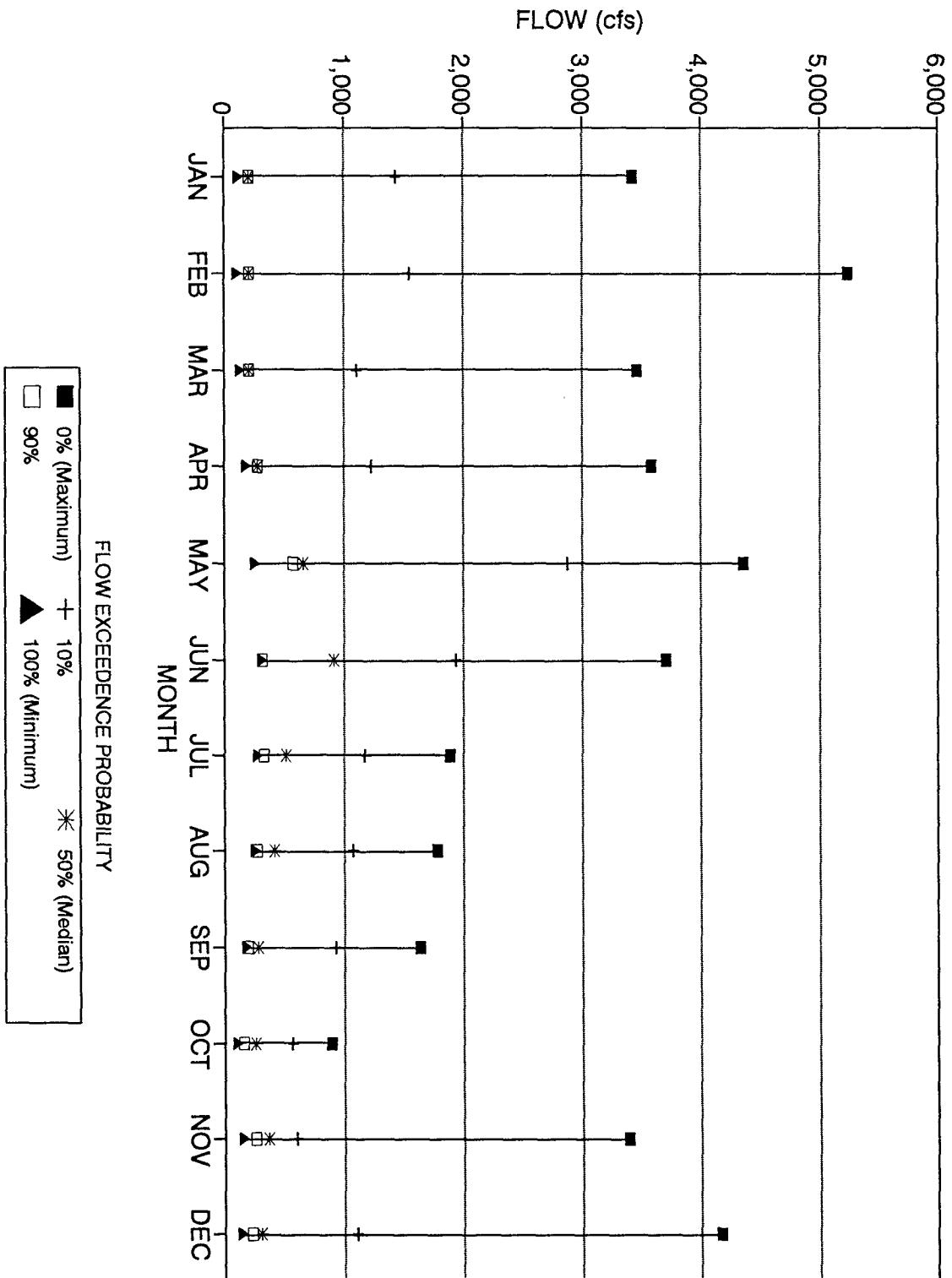
C - 1 0 1 6 3 8

C-101638

CAMANCHE RESERVOIR ELEVATION UNDER CPIII DELTA DIVERSION  
SIMULATION FROM 1921-1990 HYDROLOGY DATABASE



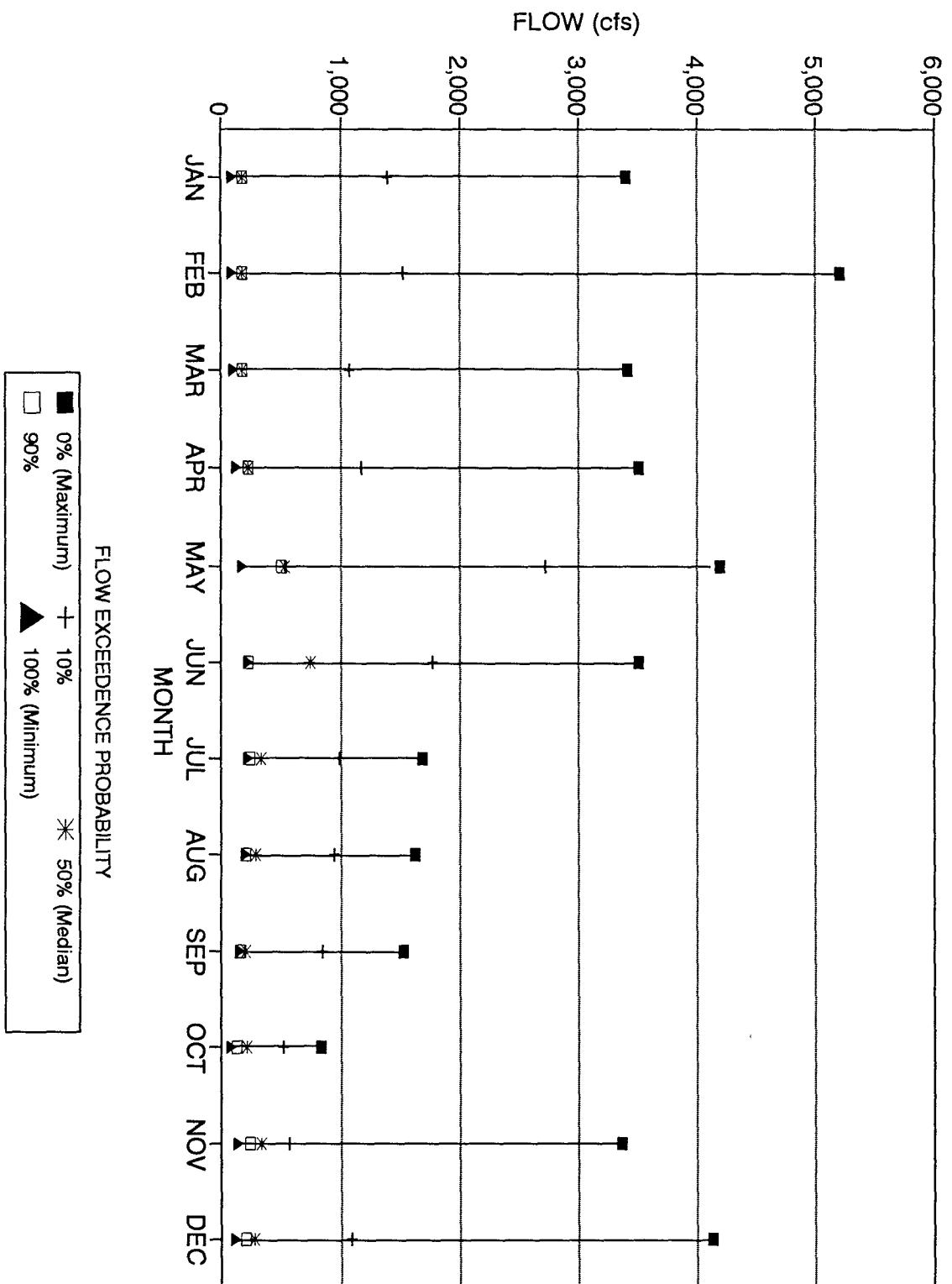
CAMANCHE RELEASES UNDER B' CPIII DELTA DIVERSION  
SIMULATION FROM 1921-1990 HYDROLOGY DATABASE



C - 1 0 1 6 4 0

C-101640

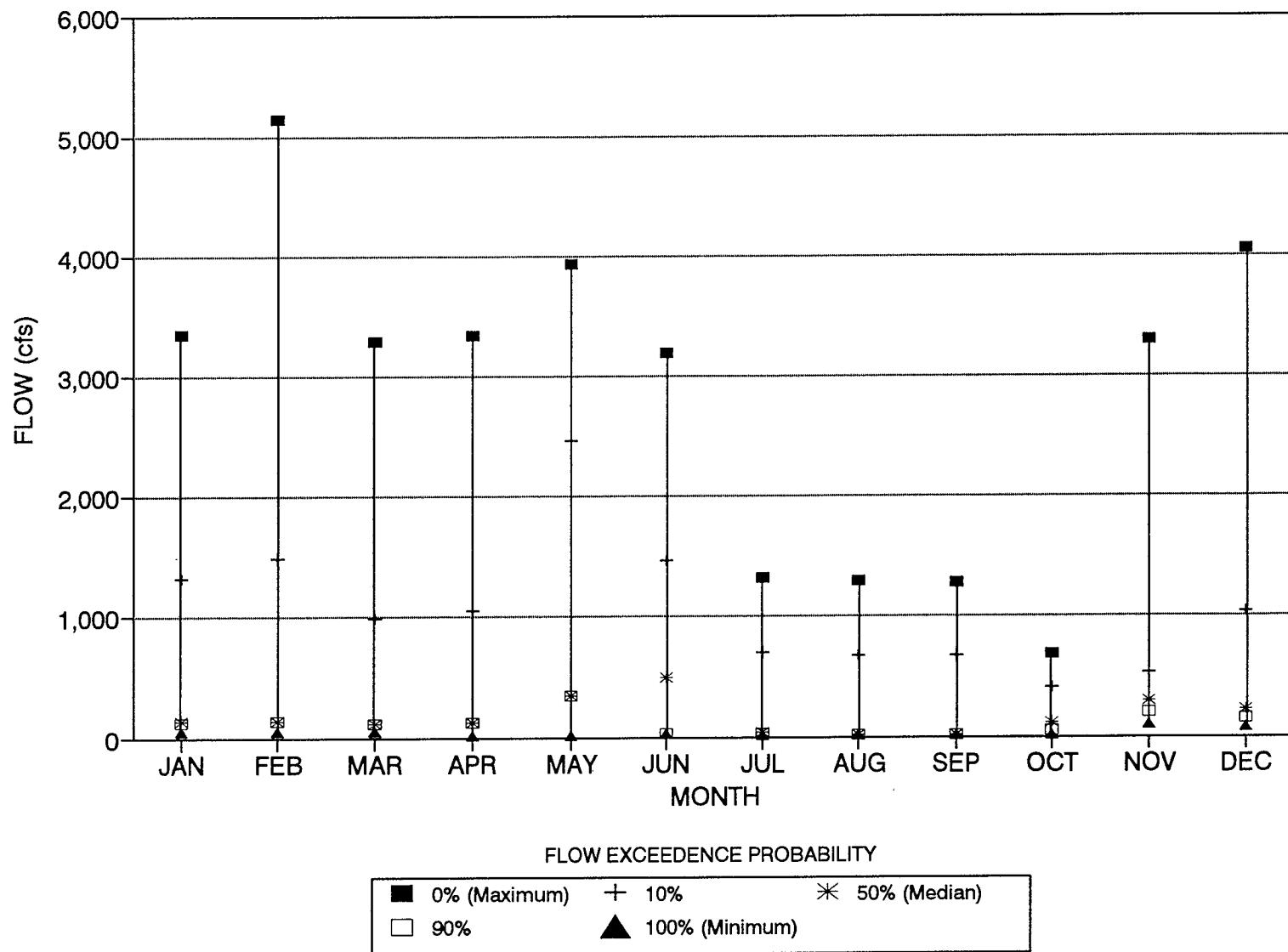
FLOW AT VICTOR UNDER B' CPIII DELTA DIVERSION  
SIMULATION FROM 1921-1990 HYDROLOGY DATABASE



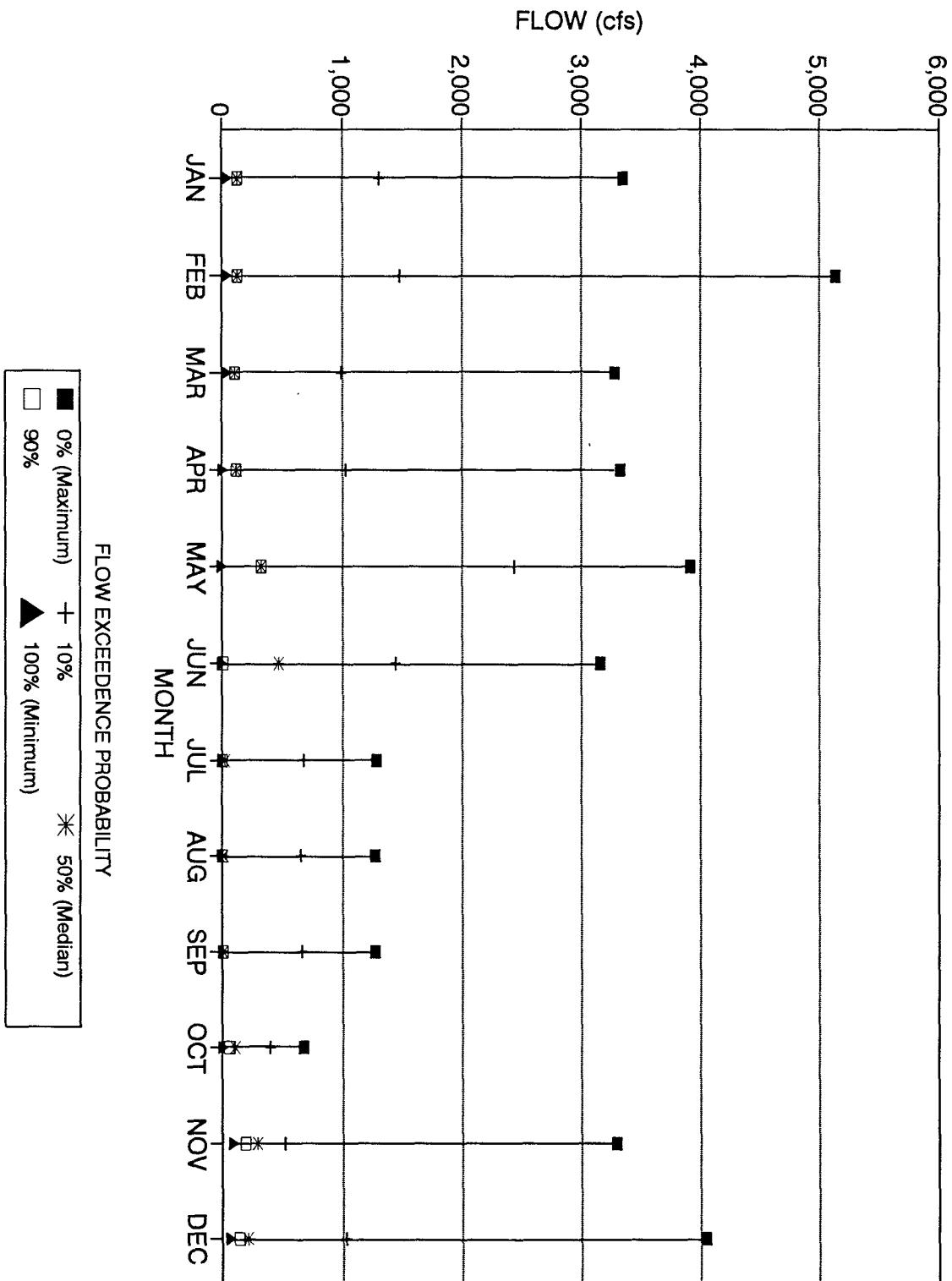
C - 1 0 1 6 4 1

C-101641

FLOW BELOW LAKE LODI UNDER B' CPIII DELTA DIVERSION  
SIMULATION FROM 1921-1990 HYDROLOGY DATABASE



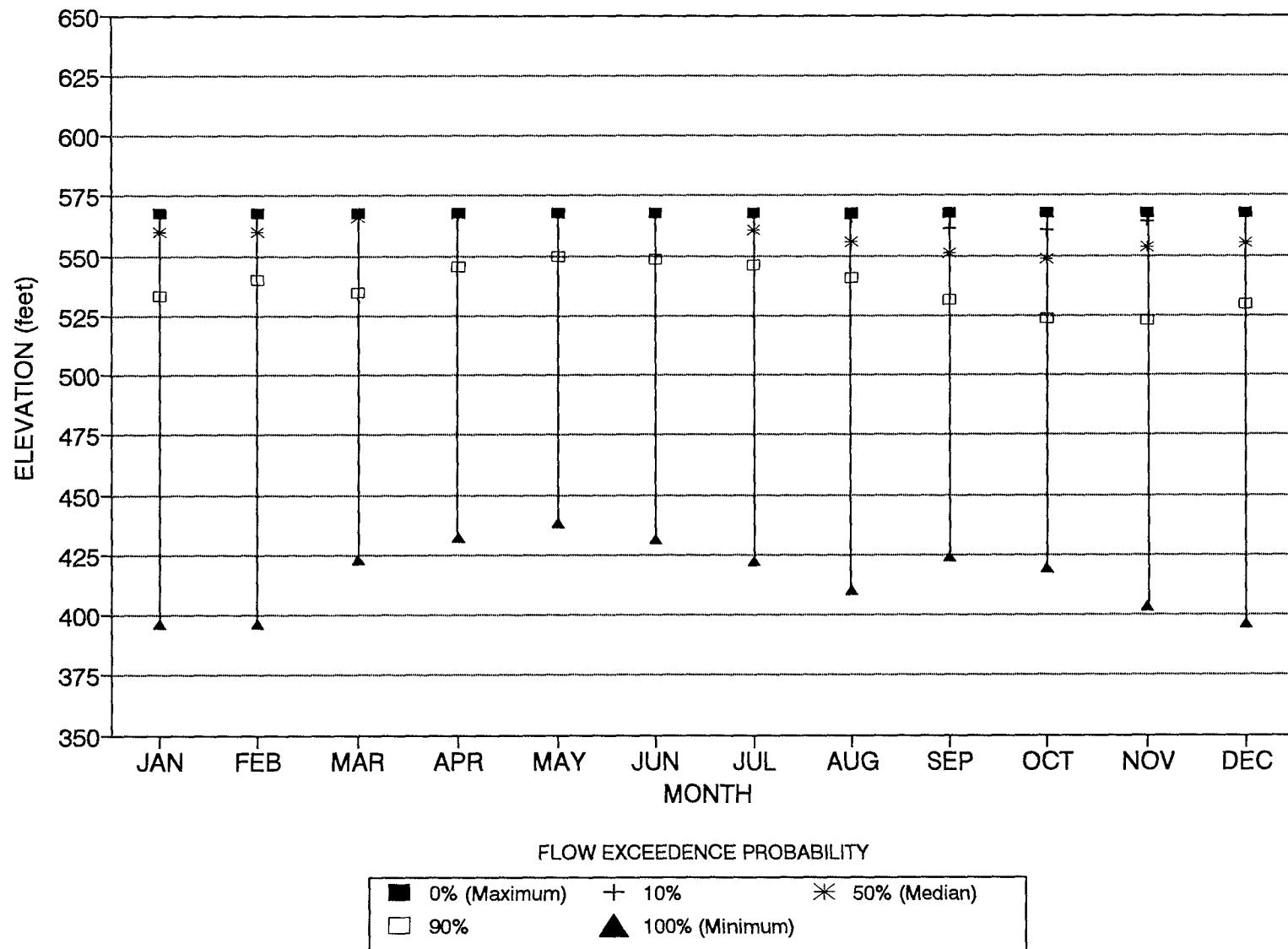
FLOW INTO THE DELTA UNDER B' CPIII DELTA DIVERSION  
SIMULATION FROM 1921-1990 HYDROLOGY DATABASE



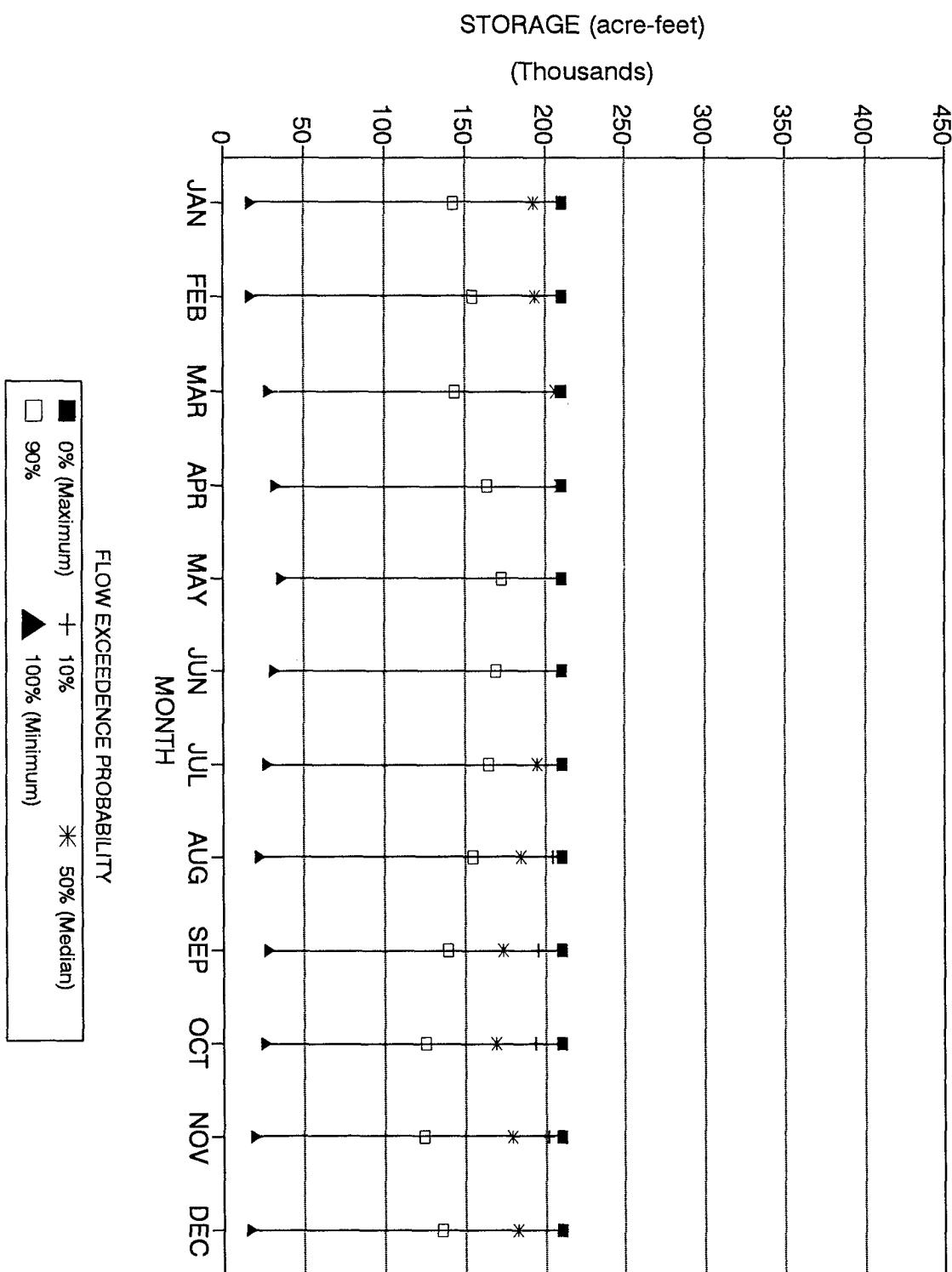
C - 1 0 1 6 4 3

C-101643

PARDEE RESERVOIR ELEVATION UNDER CPIV - GROUNDWATER AND FSC  
SIMULATION FROM 1921-1990 HYDROLOGY DATABASE



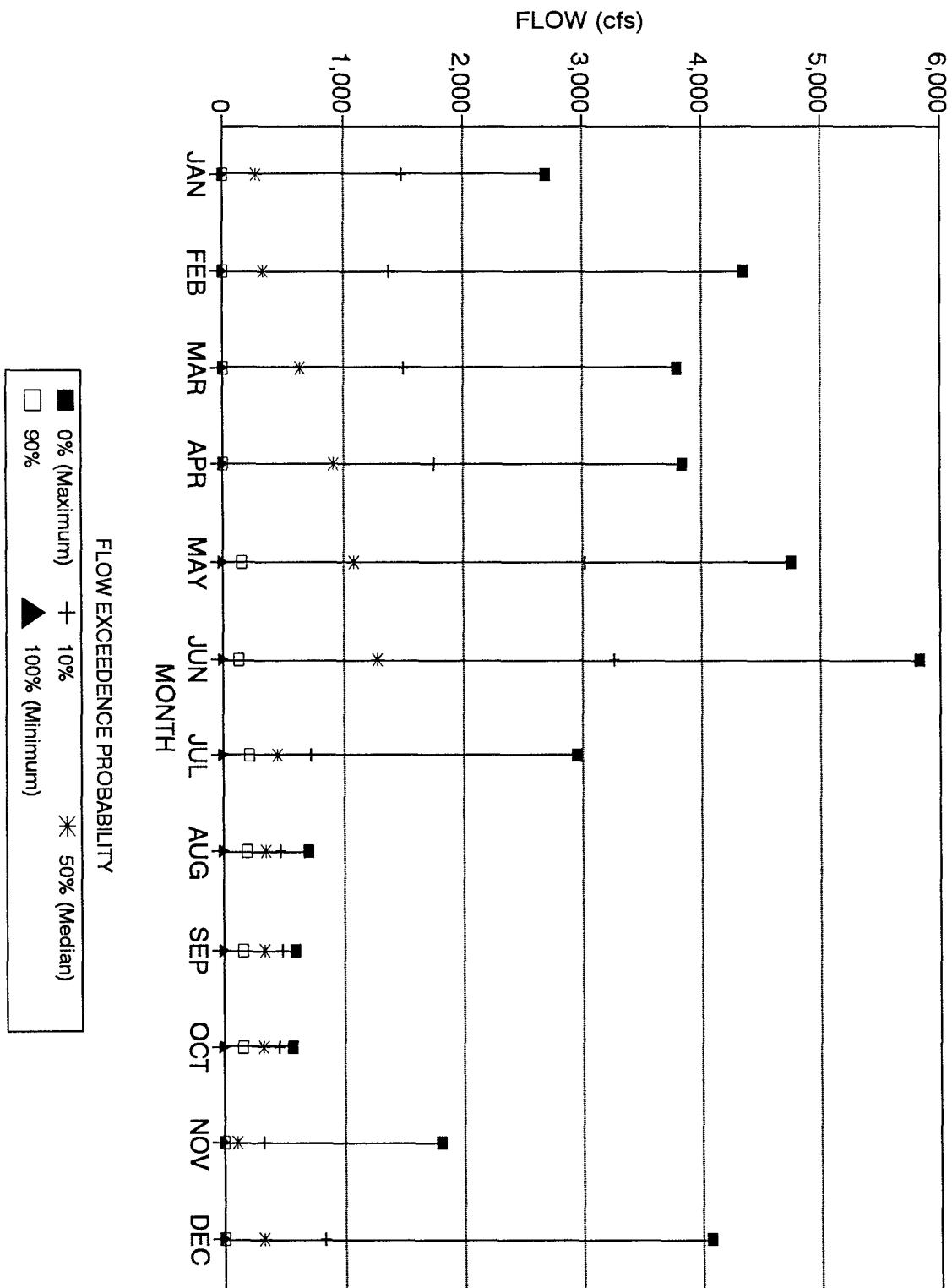
**PARDEE RESERVOIR STORAGE UNDER CPIV - GROUNDWATER AND FSC  
SIMULATION FROM 1921-1990 HYDROLOGY DATABASE**



**C - 1 0 1 6 4 5**

C-101645

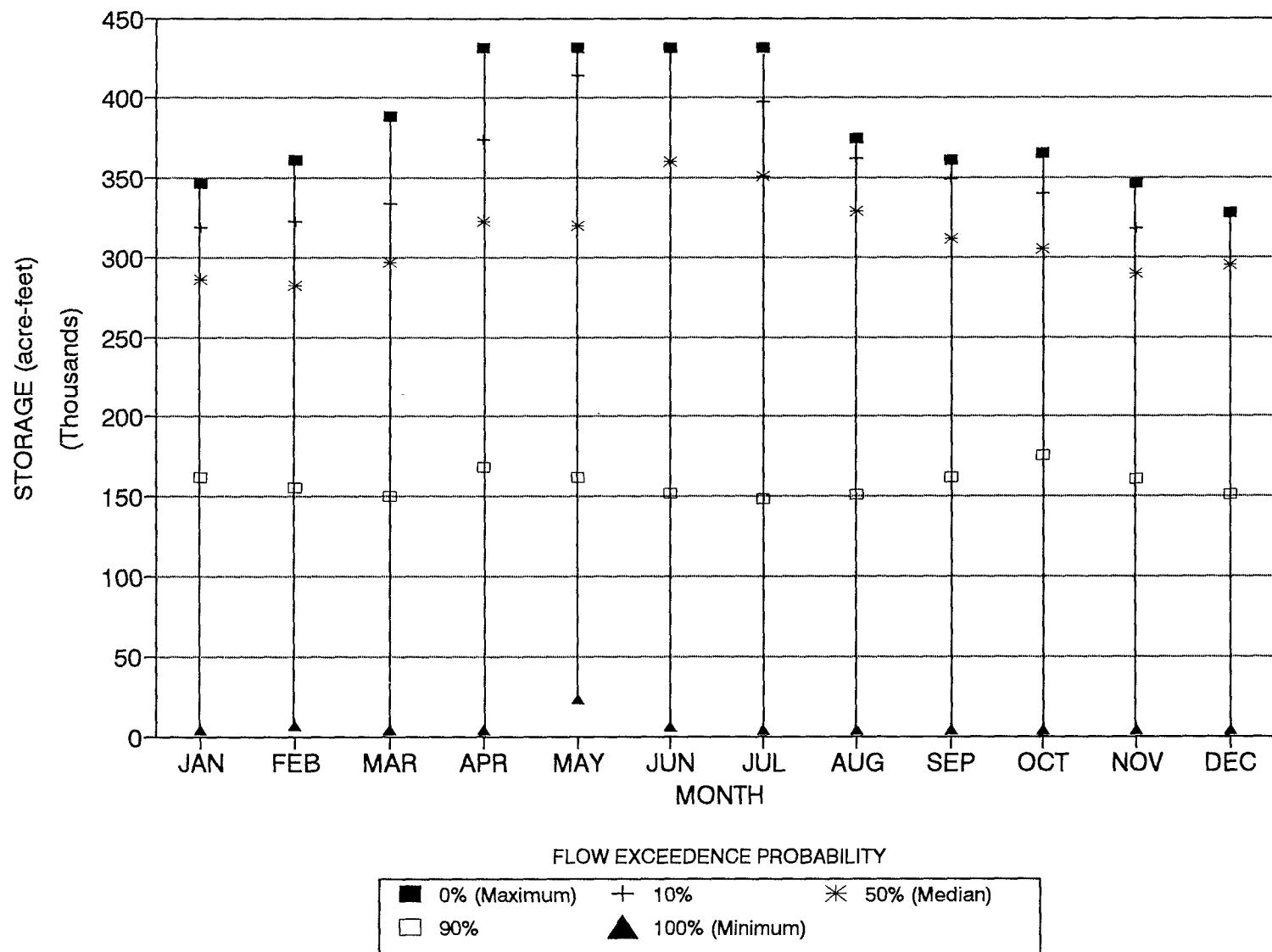
**PARDEE RELEASES UNDER CPIV - GROUNDWATER AND FSC  
SIMULATION FROM 1921-1990 HYDROLOGY DATABASE**



**C - 1 0 1 6 4 6**

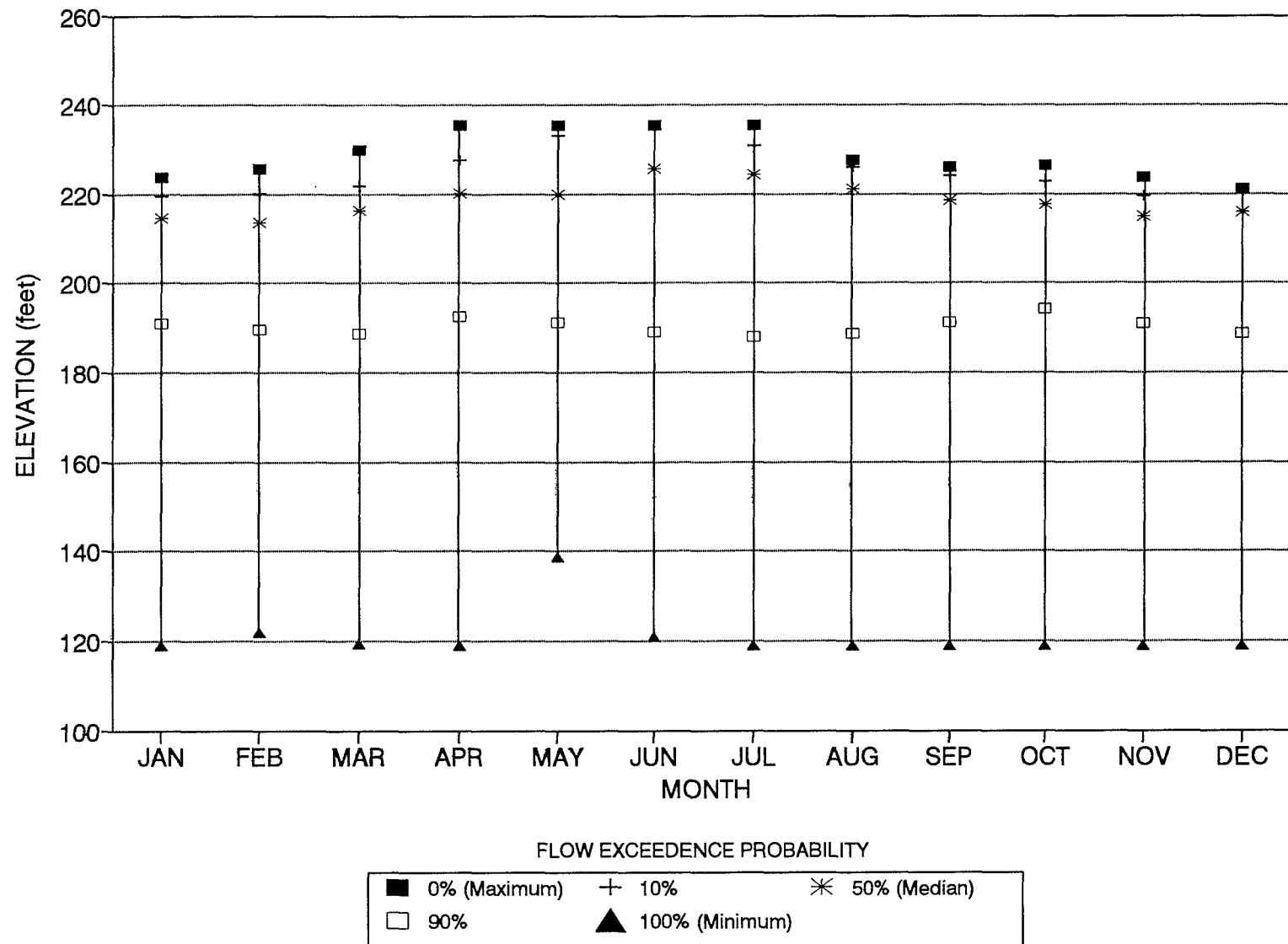
C-101646

CAMANCHE RESERVOIR STORAGE UNDER CPIV - GROUNDWATER AND FSC  
SIMULATION FROM 1921-1990 HYDROLOGY DATABASE



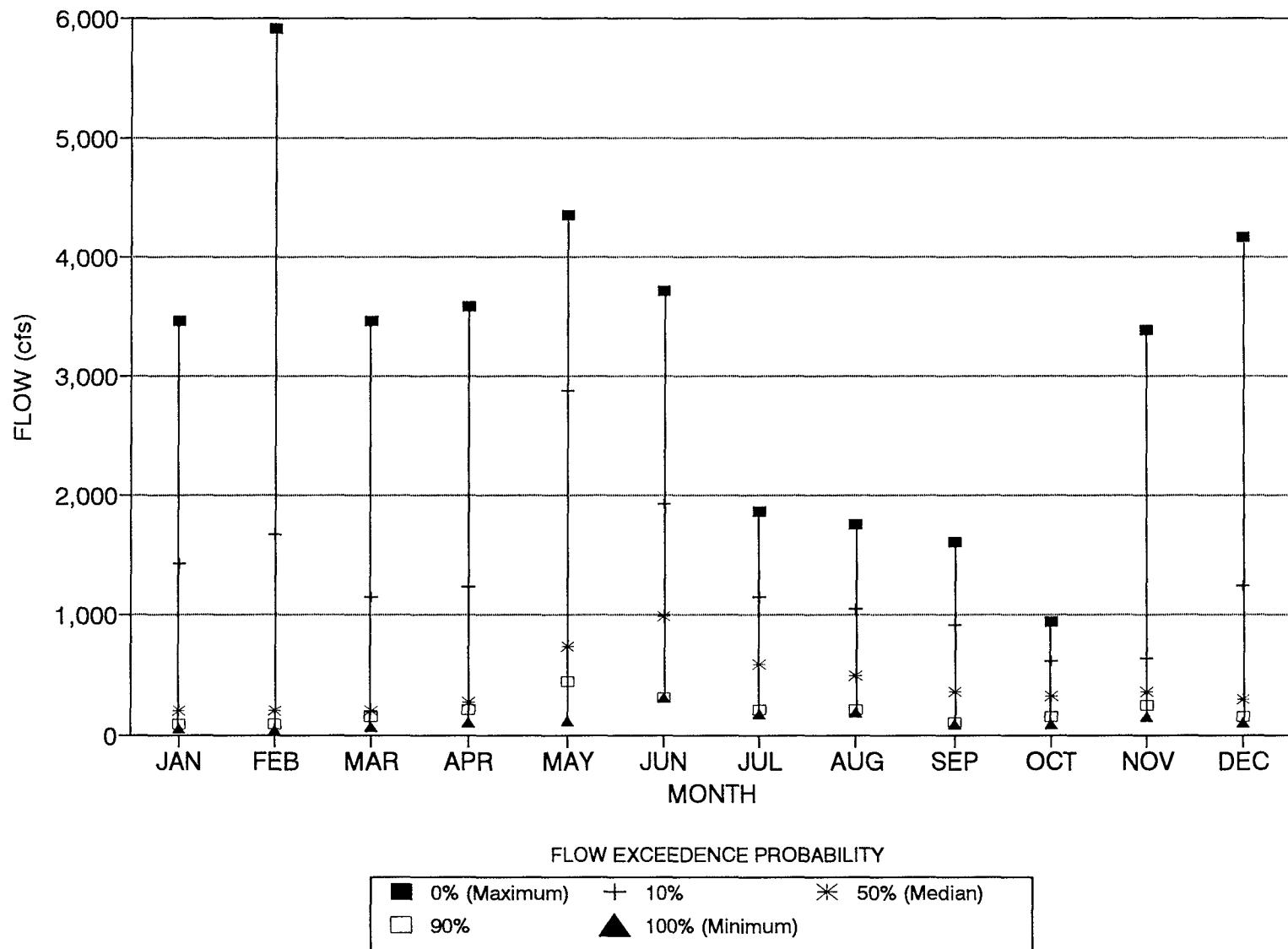
C-101647

CAMANCHE RESERVOIR ELEVATION UNDER CPIV - GROUNDWATER AND FSC  
SIMULATION FROM 1921-1990 HYDROLOGY DATABASE



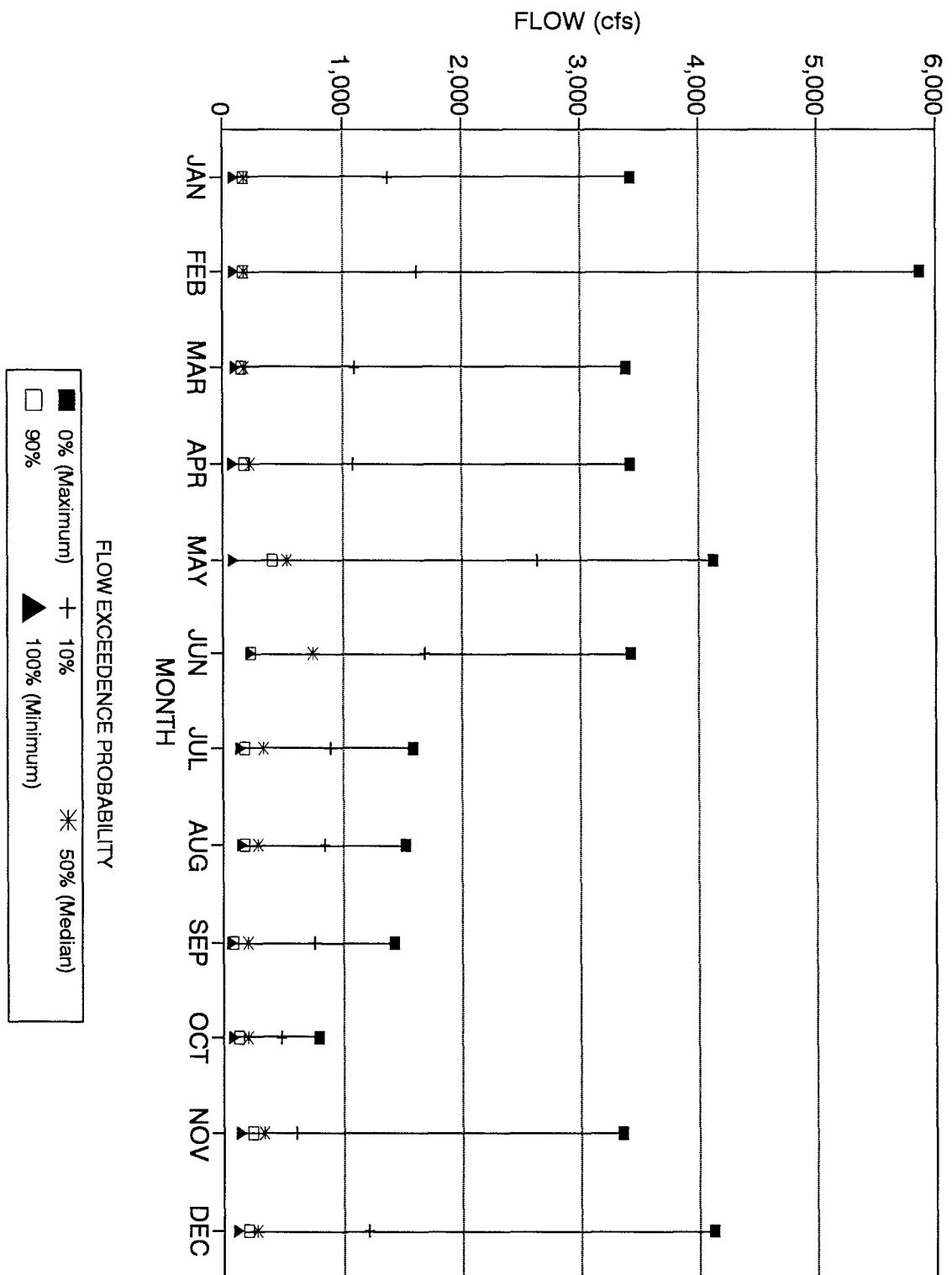
C-101648

CAMANCHE RELEASES UNDER CPIV - GROUNDWATER AND FSC  
SIMULATION FROM 1921-1990 HYDROLOGY DATABASE



C-101649

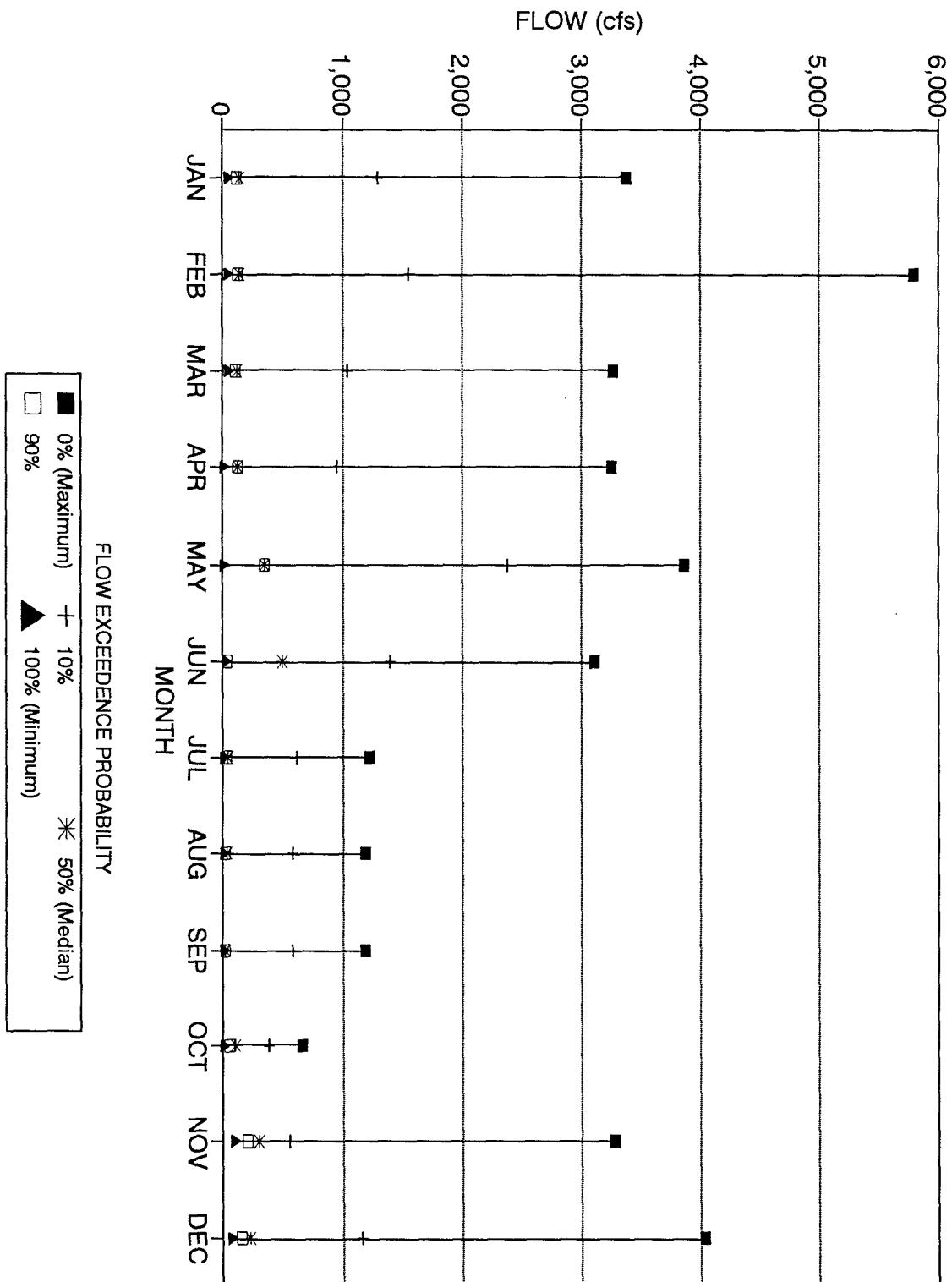
**FLOW AT VICTOR UNDER CPIV - GROUNDWATER AND FSC  
SIMULATION FROM 1921-1990 HYDROLOGY DATABASE**



C - 1 0 1 6 5 0

C-101650

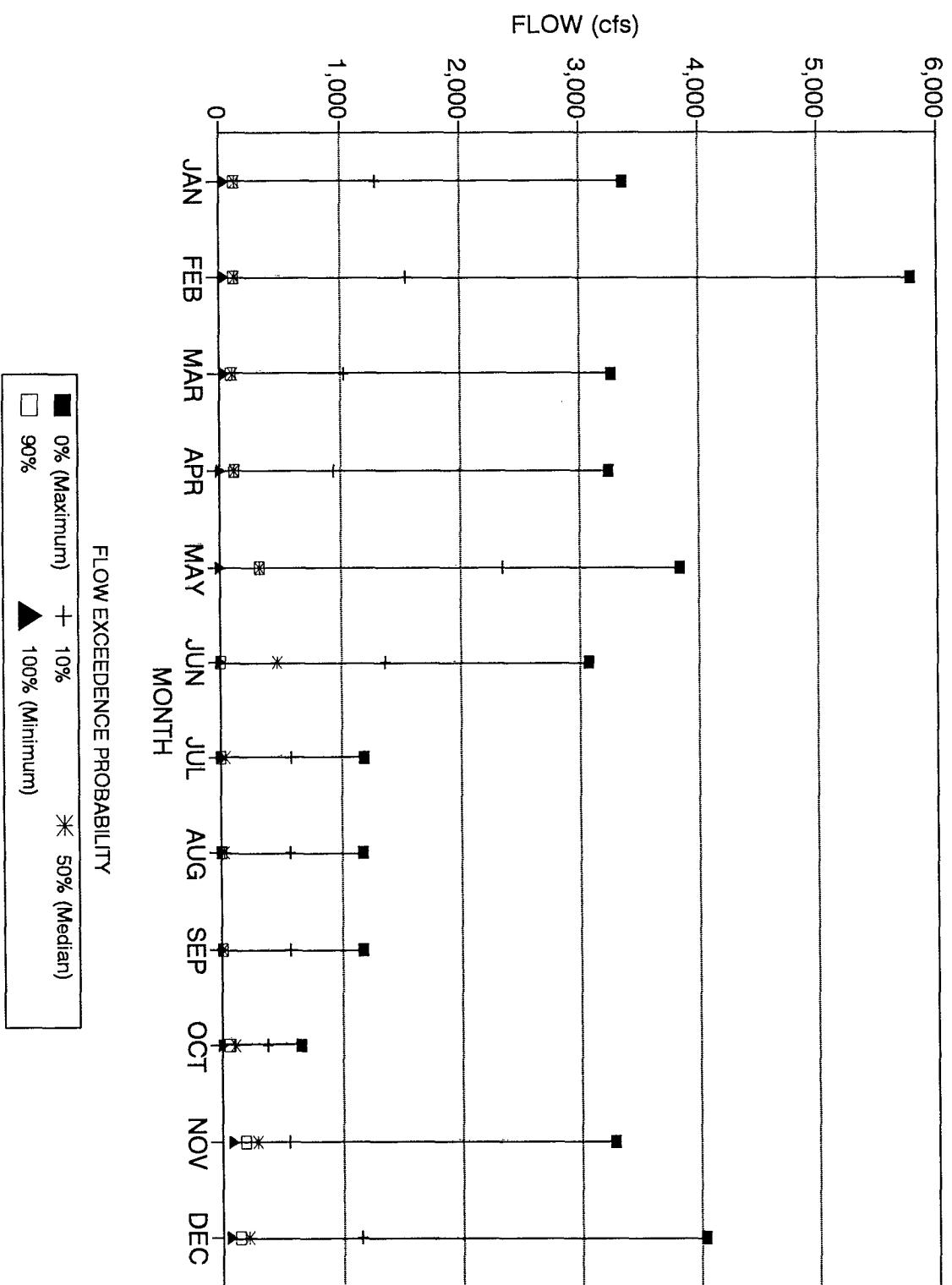
FLOW BELOW LAKE LODI UNDER CPIV - GROUNDWATER AND FSC  
SIMULATION FROM 1921-1990 HYDROLOGY DATABASE



C - 1 0 1 6 5 1

C-101651

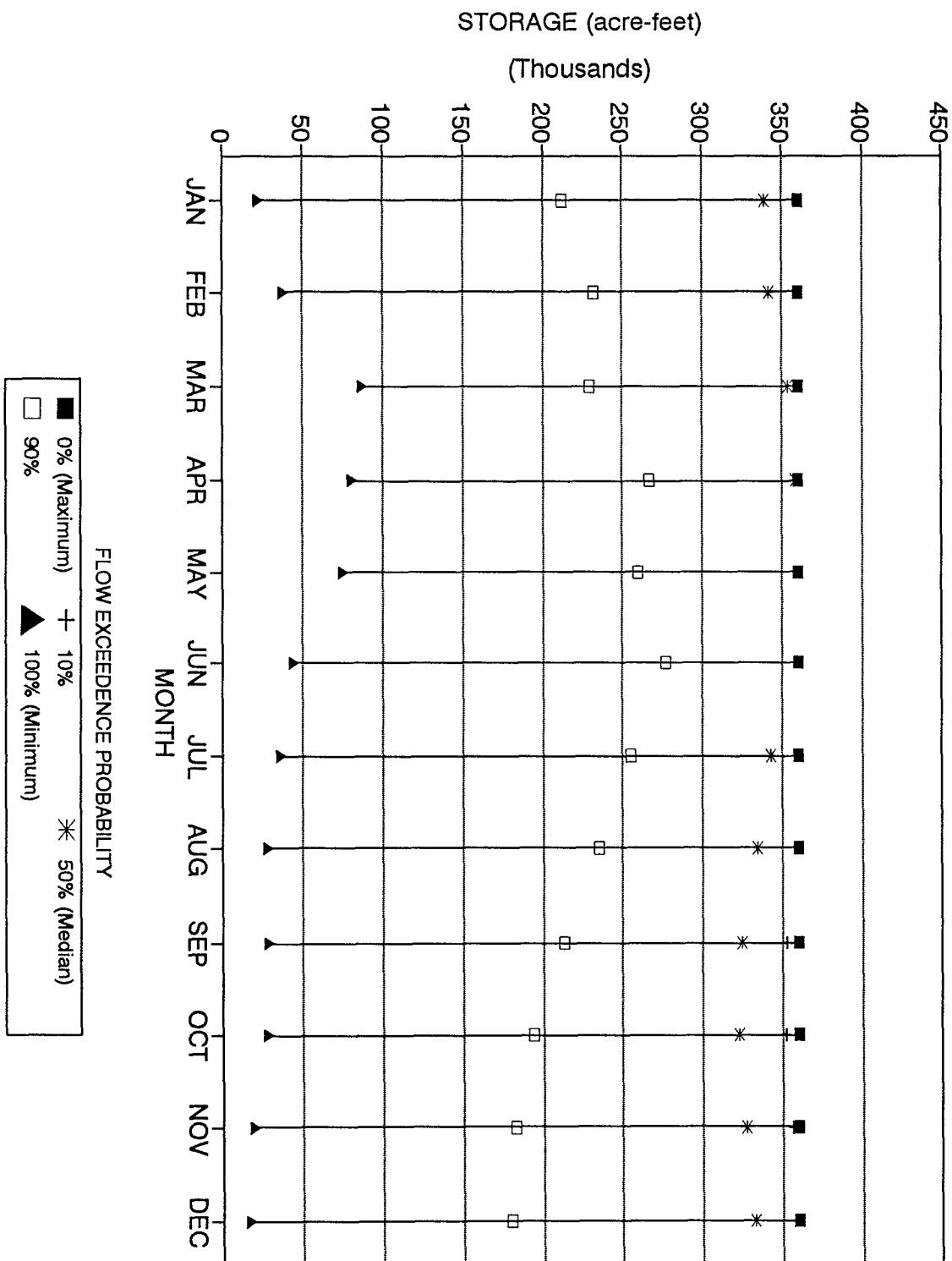
FLOW INTO THE DELTA UNDER CPIV - GROUNDWATER AND FSC  
SIMULATION FROM 1921-1990 HYDROLOGY DATABASE



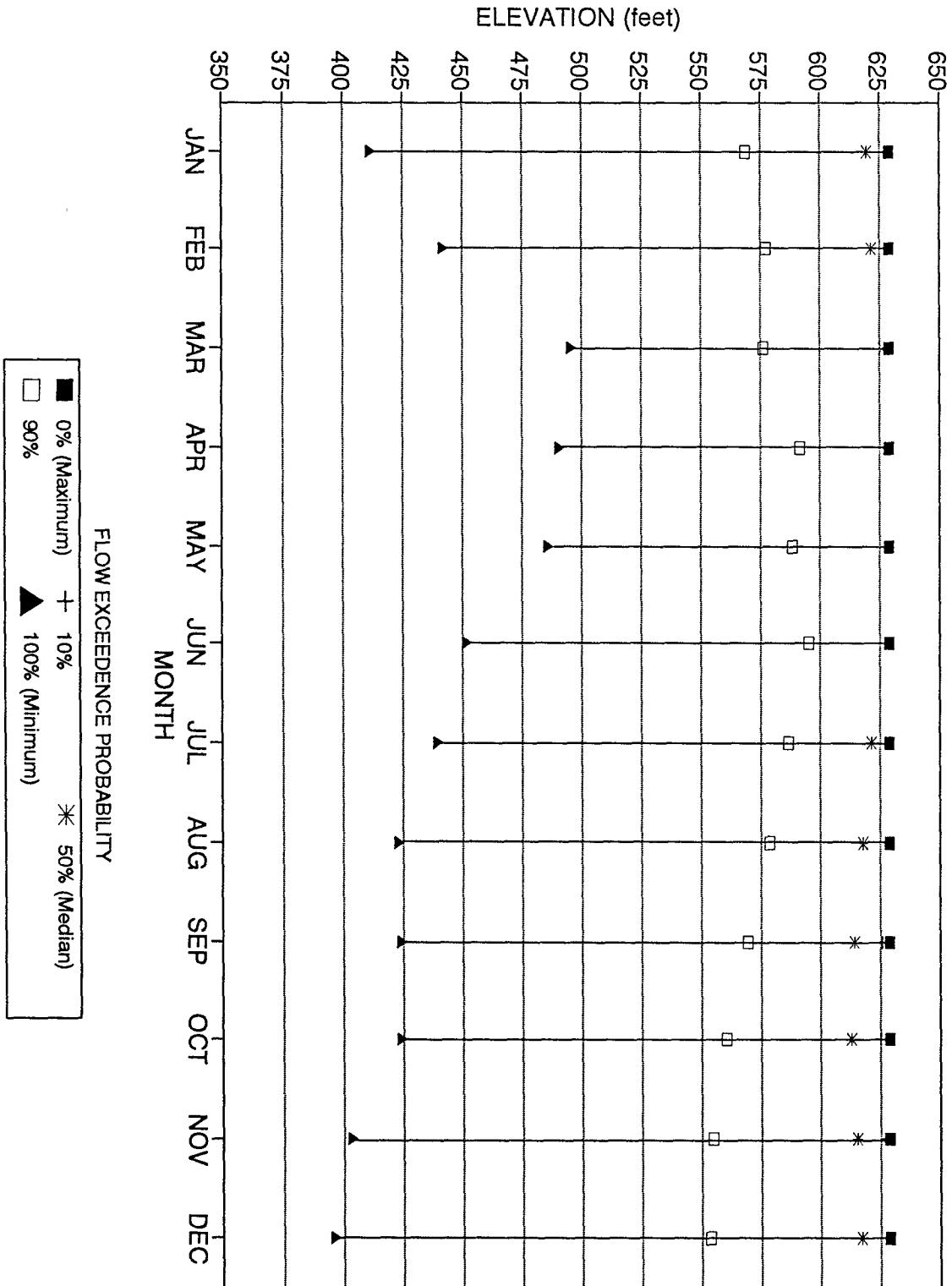
C - 1 0 1 6 5 2

C-101652

**PARDEE RESERVOIR STORAGE UNDER F CPV RAISE PARDEE 150 TAF  
SIMULATION FROM 1921-1990 HYDROLOGY DATABASE**



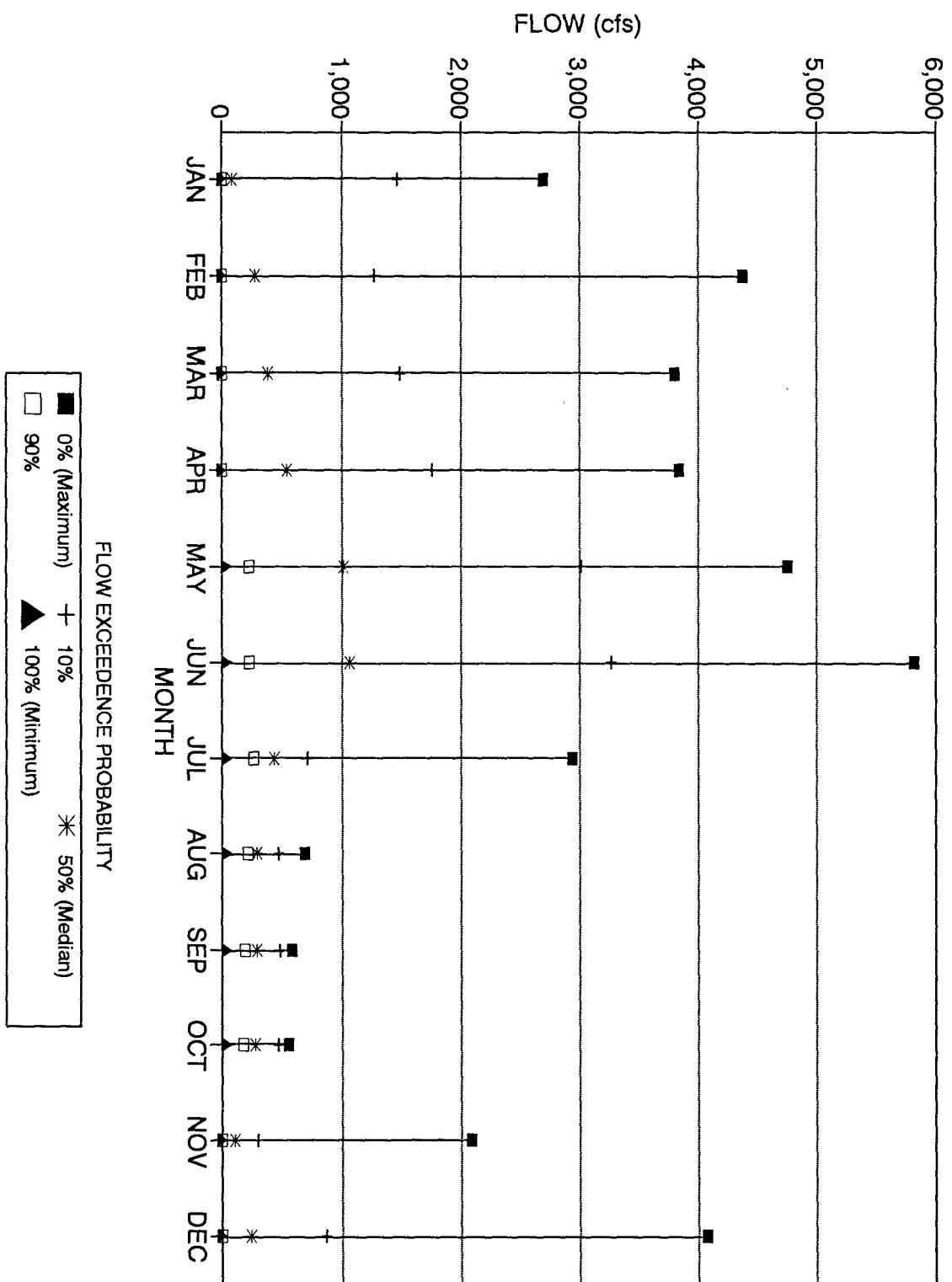
**PARDEE RESERVOIR ELEVATION UNDER CPV RAISE PARDEE 150 TAF  
SIMULATION FROM 1921-1990 HYDROLOGY DATABASE**



**C - 1 0 1 6 5 4**

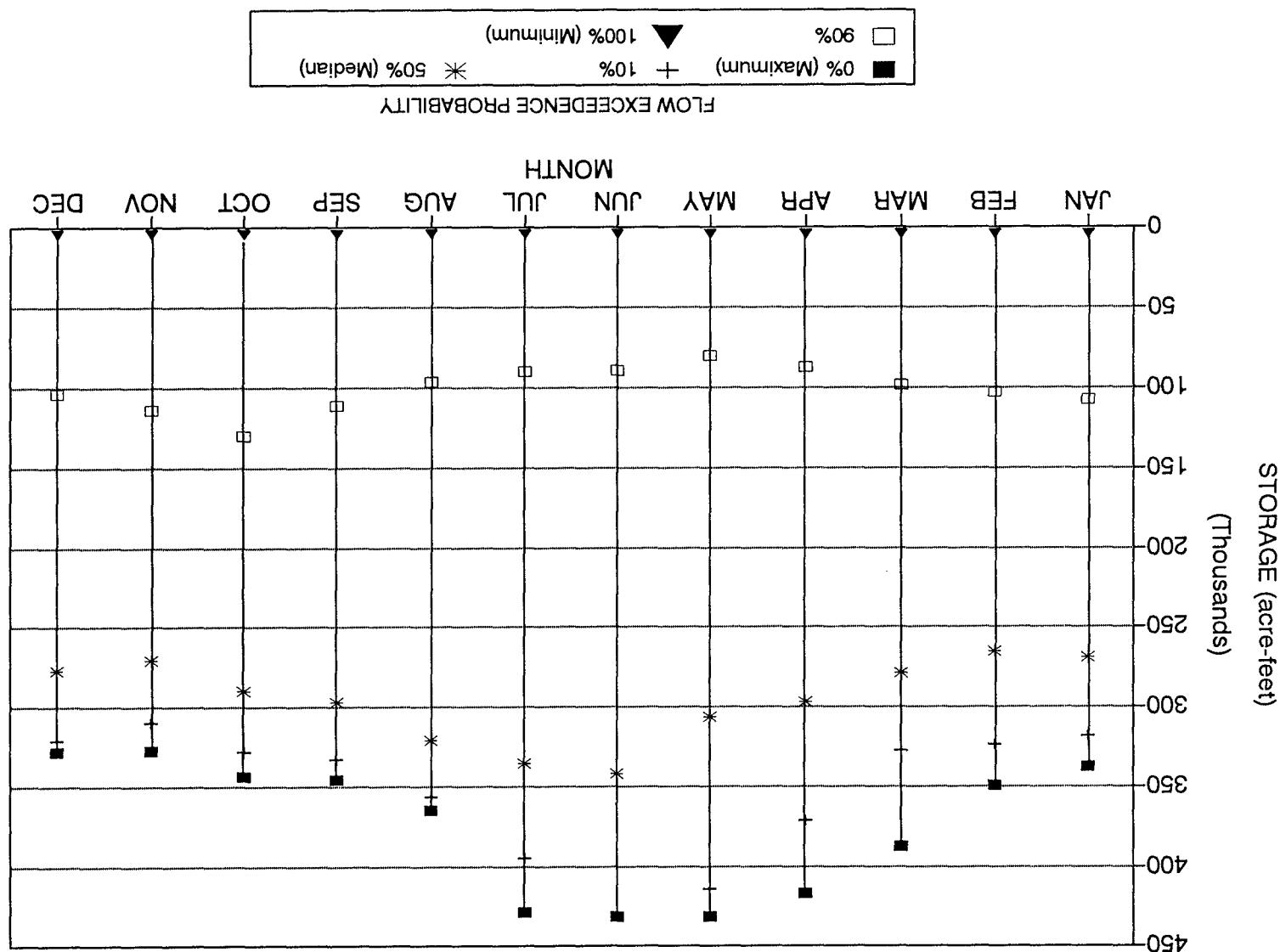
C-101654

PARDEE RELEASES UNDER F CPV RAISE PARDEE 150 TAF  
SIMULATION FROM 1921-1990 HYDROLOGY DATABASE

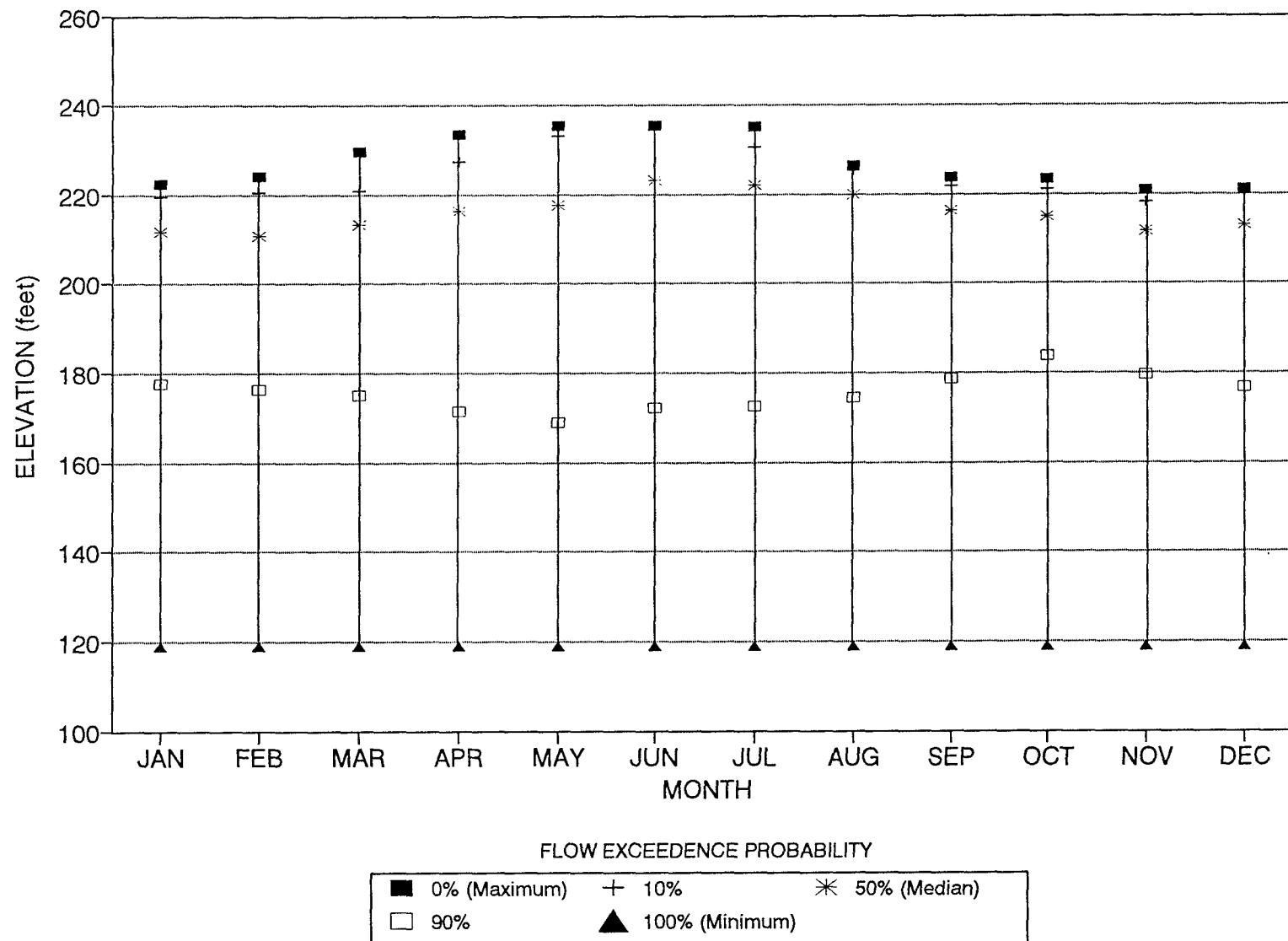


C - 1 0 1 6 5 5

C-101655

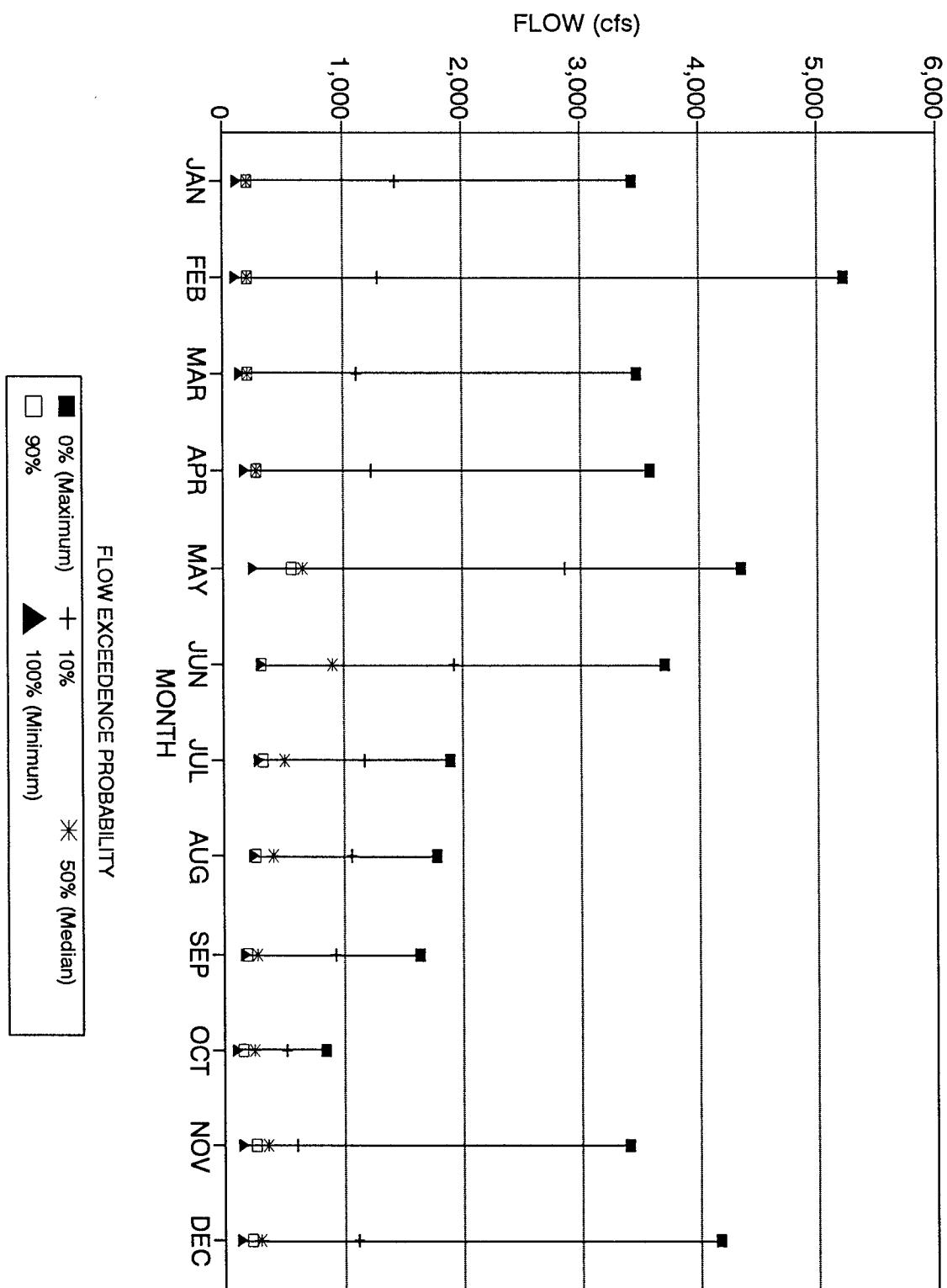


CAMANCHE RESERVOIR ELEVATION UNDER CPV RAISE PARDEE 150 TAF  
SIMULATION FROM 1921-1990 HYDROLOGY DATABASE

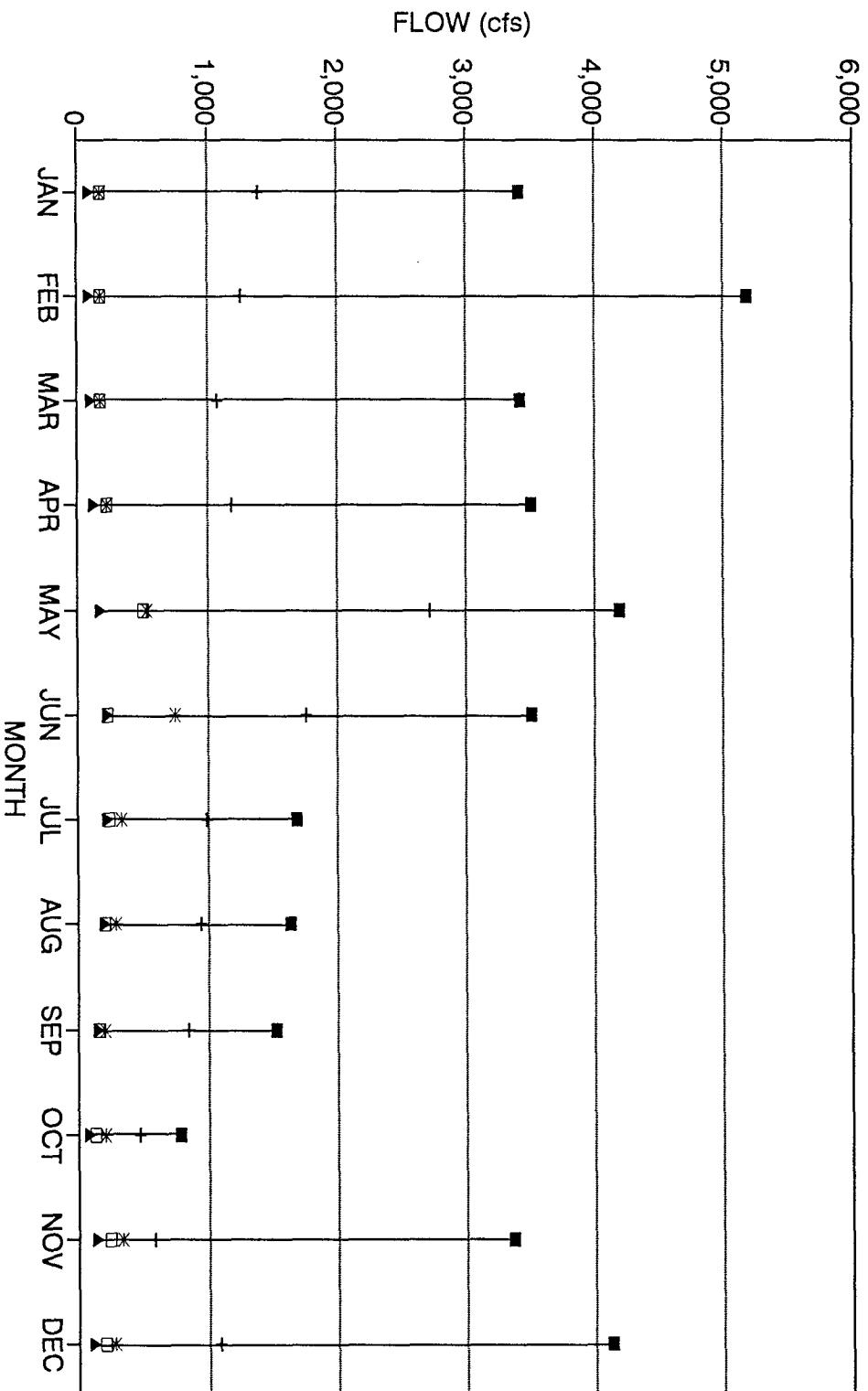


C - 1 0 1 6 5 7

CAMANCHE RELEASES UNDER F CPV RAISE PARDEE 150 TAF  
SIMULATION FROM 1921-1990 HYDROLOGY DATABASE

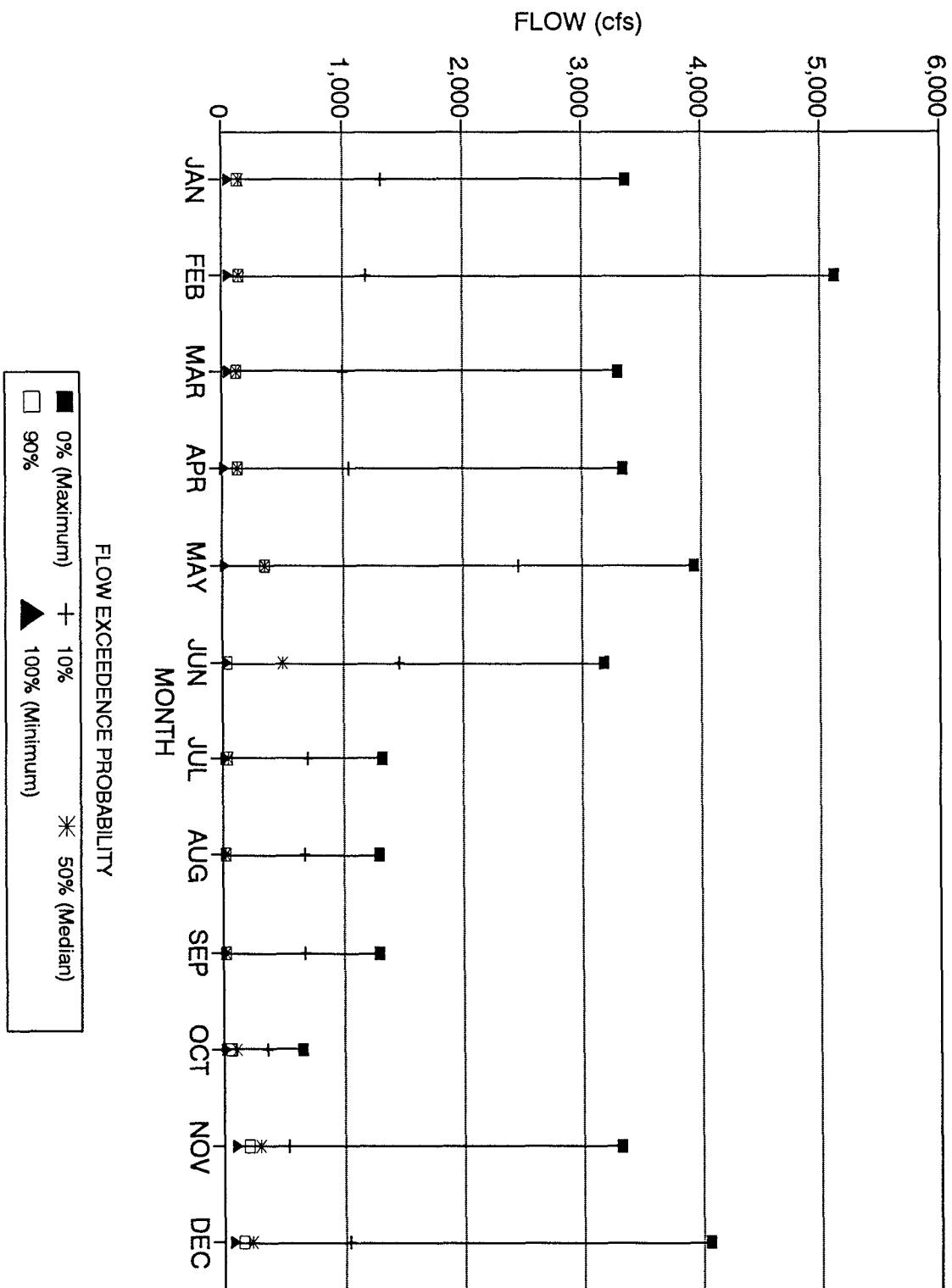


FLOW AT VICTOR UNDER F CPV RAISE PARDEE 150 TAF  
SIMULATION FROM 1921-1990 HYDROLOGY DATABASE



■ 0% (Maximum) + 10% \* 50% (Median)  
□ 90% ▲ 100% (Minimum)

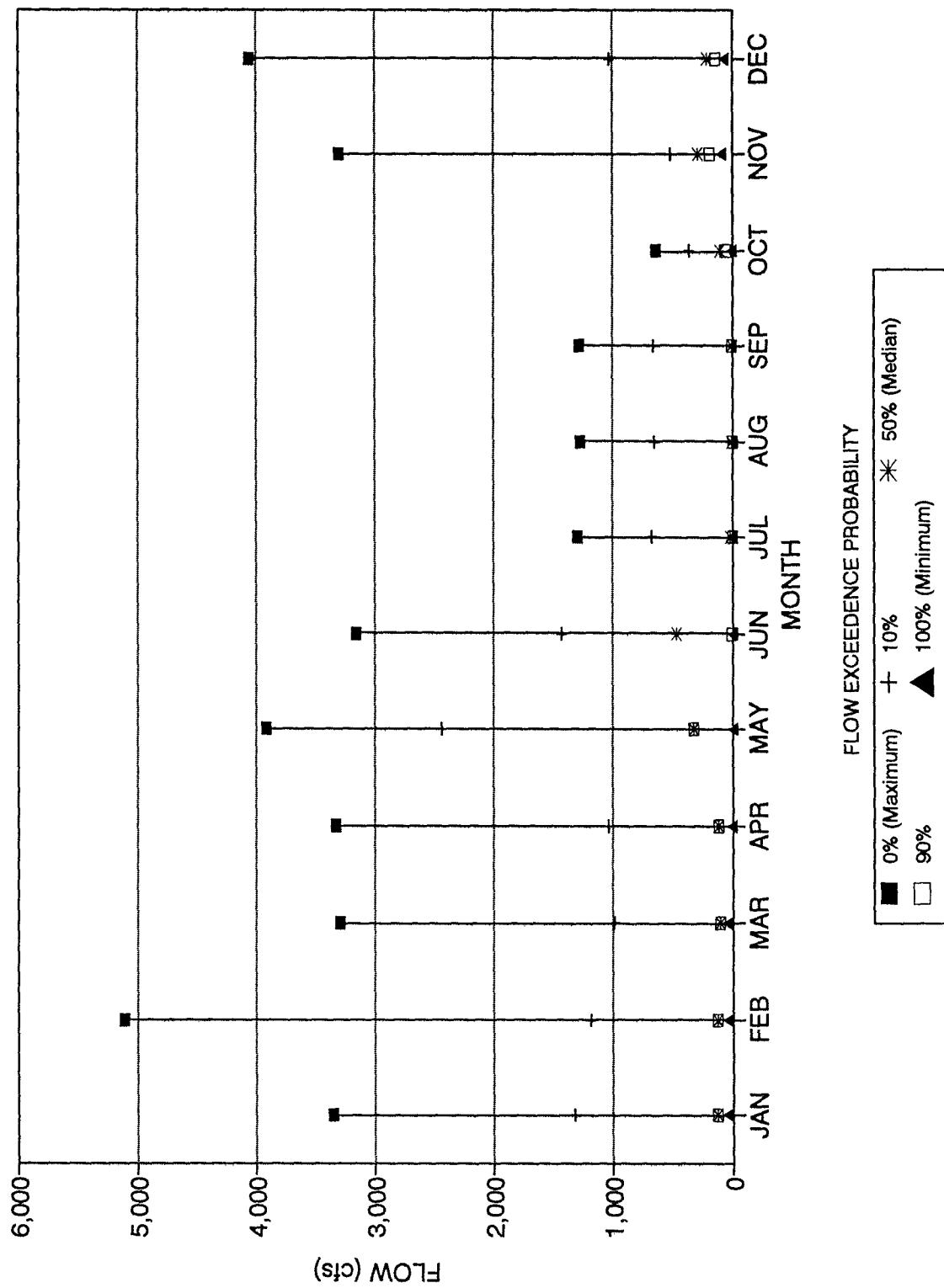
FLOW BELOW LAKE LODI UNDER F CPV RAISE PARDEE 150 TAF  
SIMULATION FROM 1921-1990 HYDROLOGY DATABASE



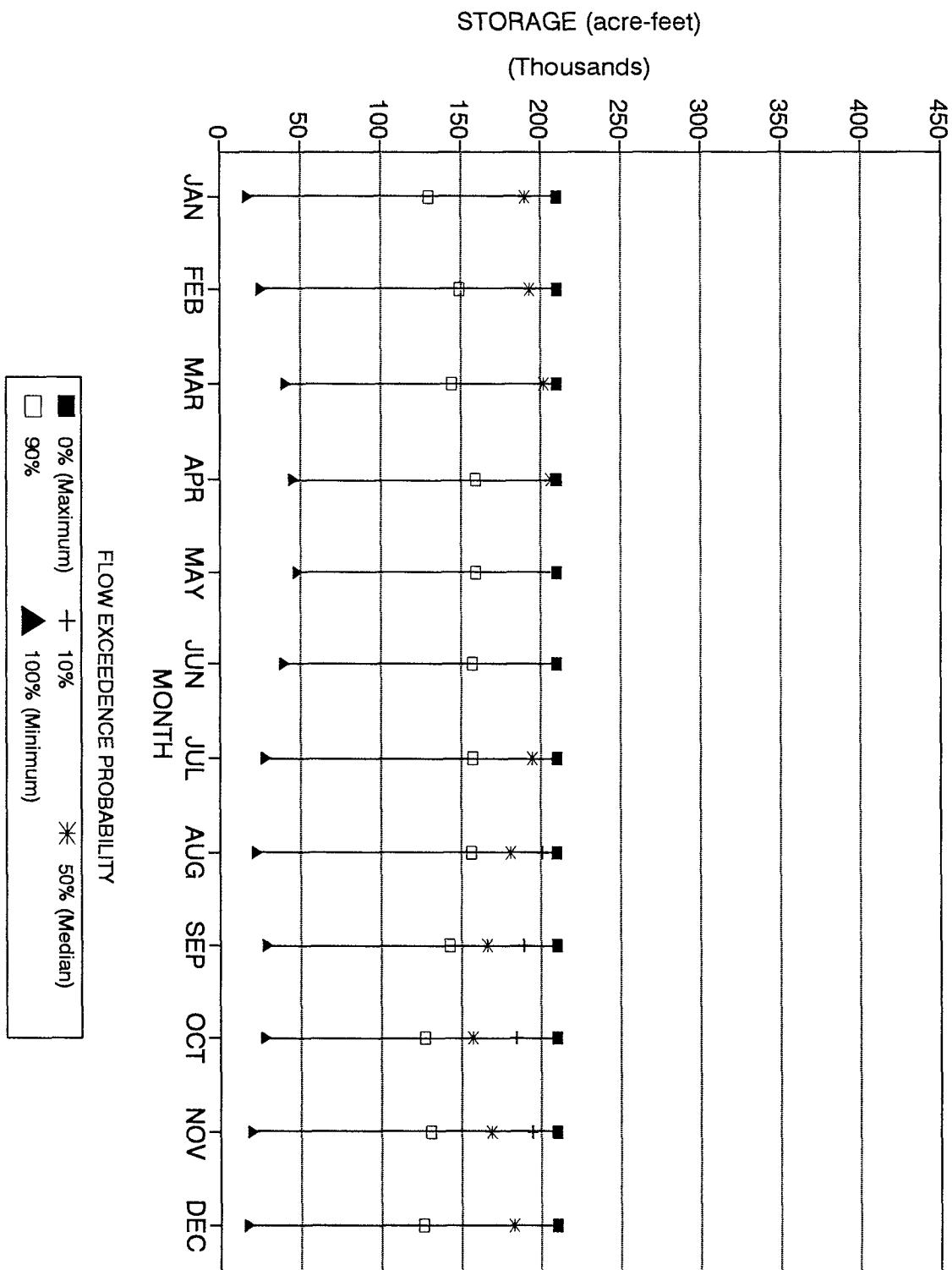
C - 1 0 1 6 6 0

C-101660

FLOW INTO THE DELTA UNDER F CPV RAISE PARDEE 150 TAF  
SIMULATION FROM 1921-1990 HYDROLOGY DATABASE



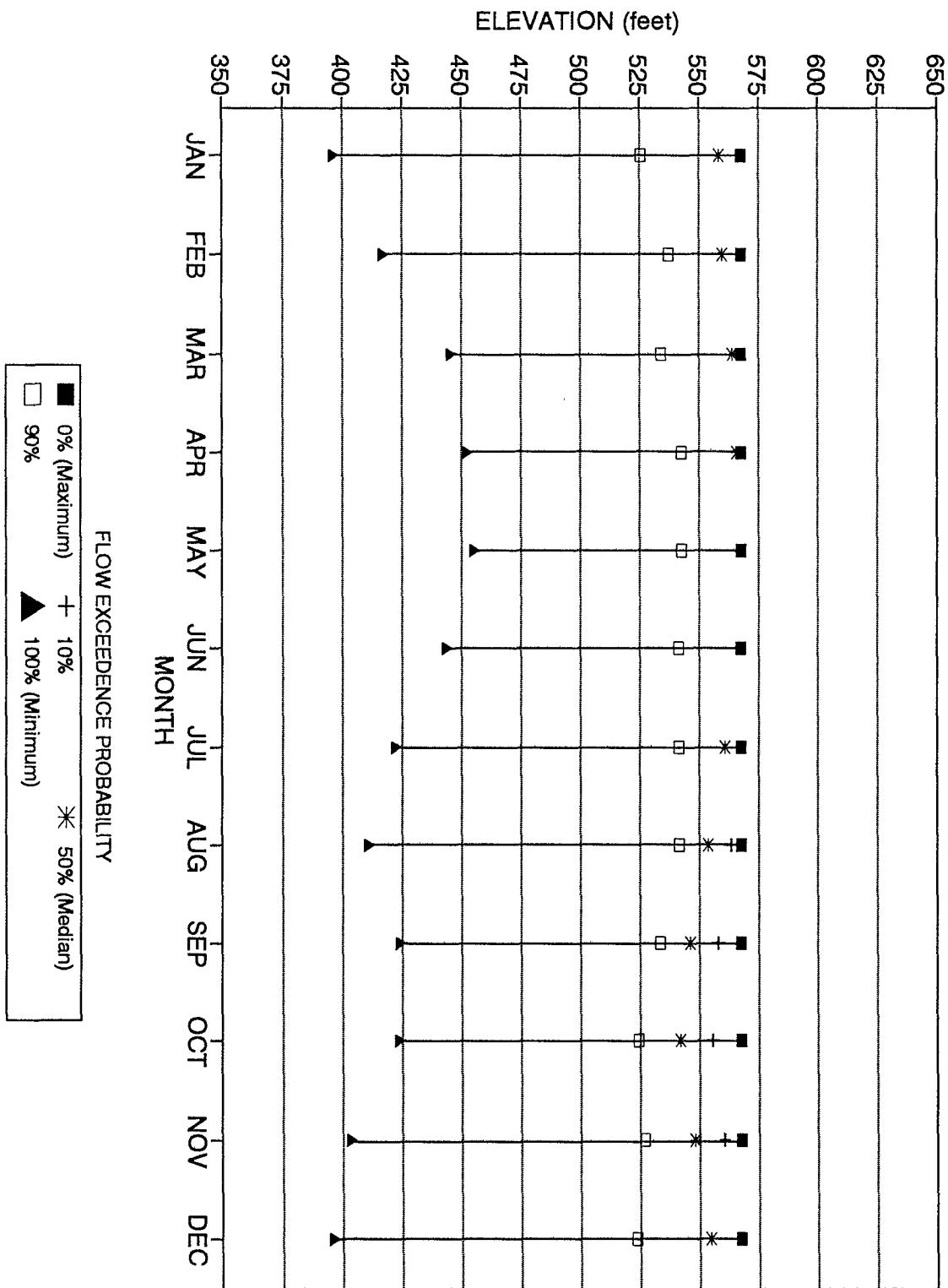
**PARDEE RESERVOIR STORAGE UNDER CPVI - GROUNDWATER ONLY  
SIMULATION FROM 1921-1990 HYDROLOGY DATABASE**



C - 1 0 1 6 6 2

C-101662

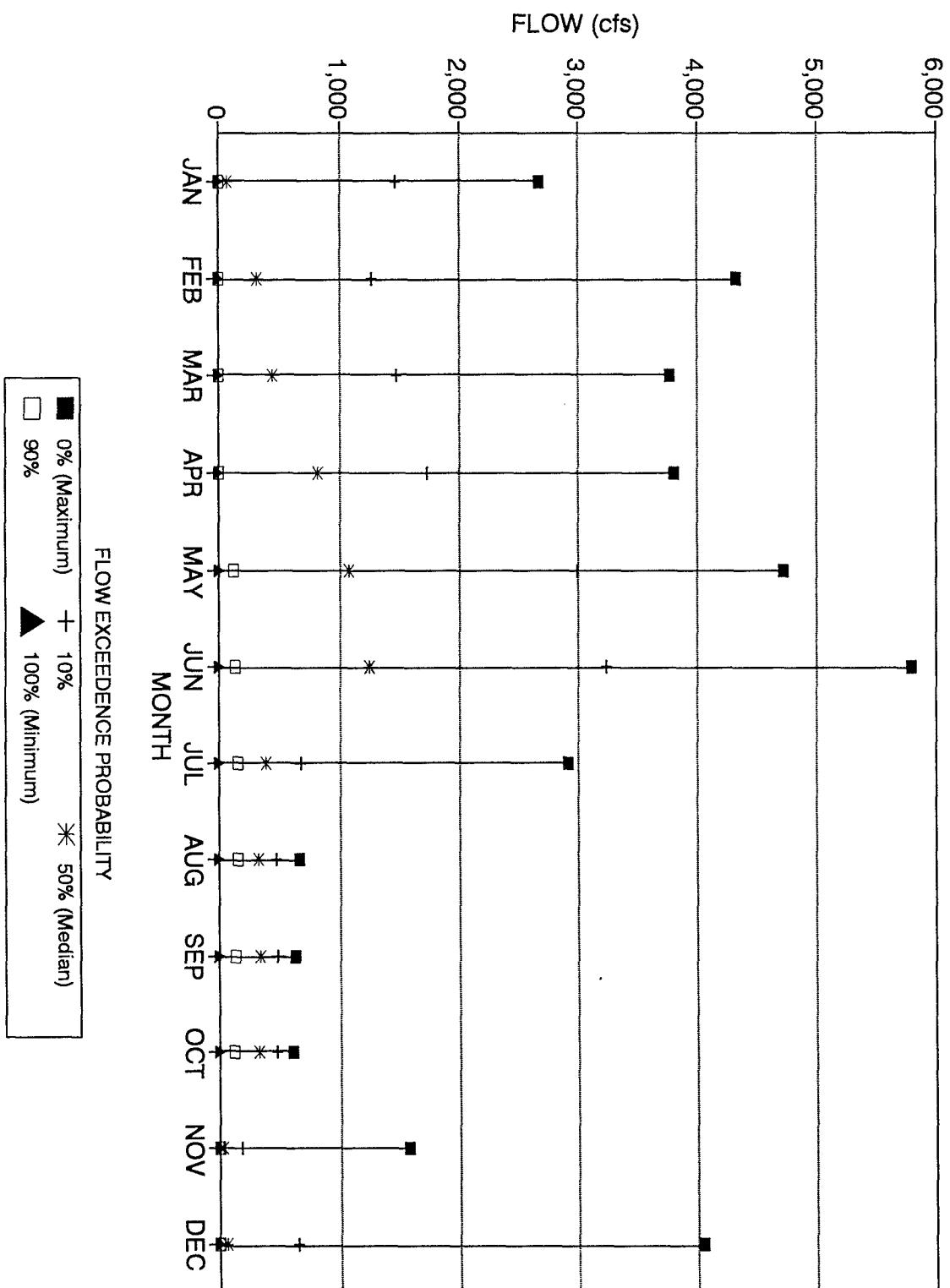
**PARDEE RESERVOIR ELEVATION UNDER CPVI - GROUNDWATER ONLY  
SIMULATION FROM 1921-1990 HYDROLOGY DATABASE**



C - 1 0 1 6 6 3

C-101663

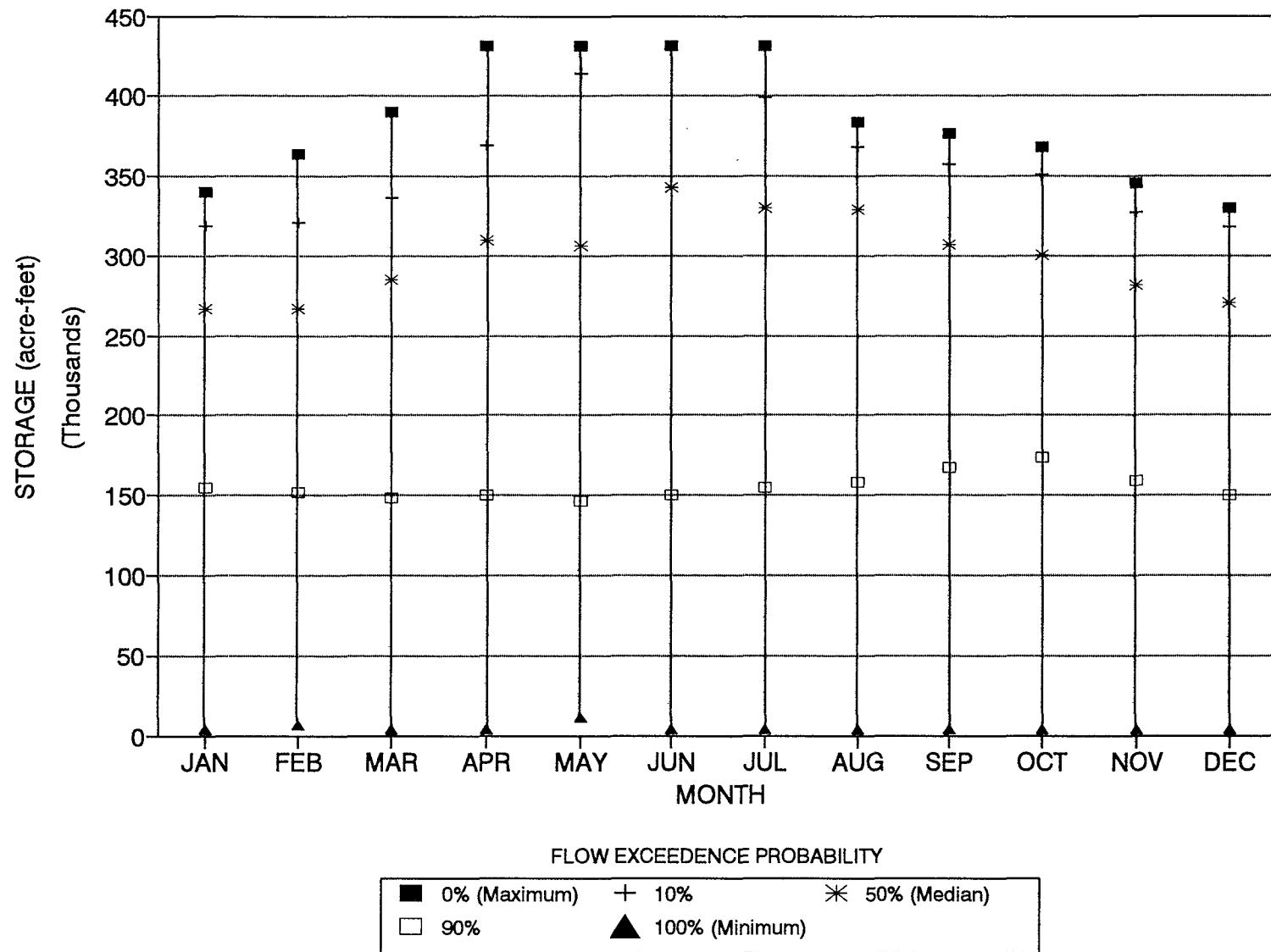
PARDEE RELEASES UNDER CPVI - GROUNDWATER ONLY  
SIMULATION FROM 1921-1990 HYDROLOGY DATABASE



C - 1 0 1 6 6 4

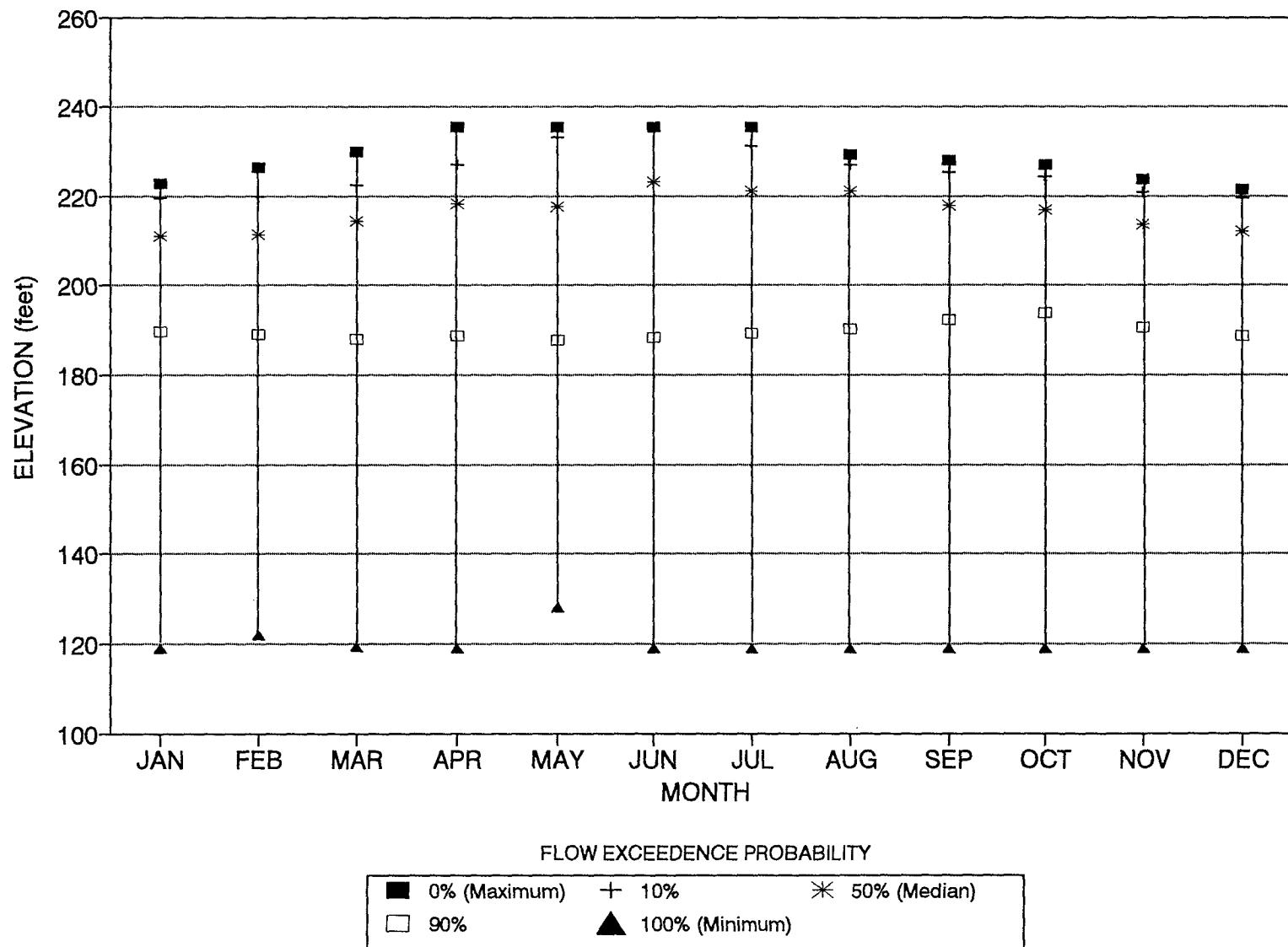
C-101664

CAMANCHE RESERVOIR STORAGE UNDER CPVI - GROUNDWATER ONLY  
SIMULATION FROM 1921-1990 HYDROLOGY DATABASE



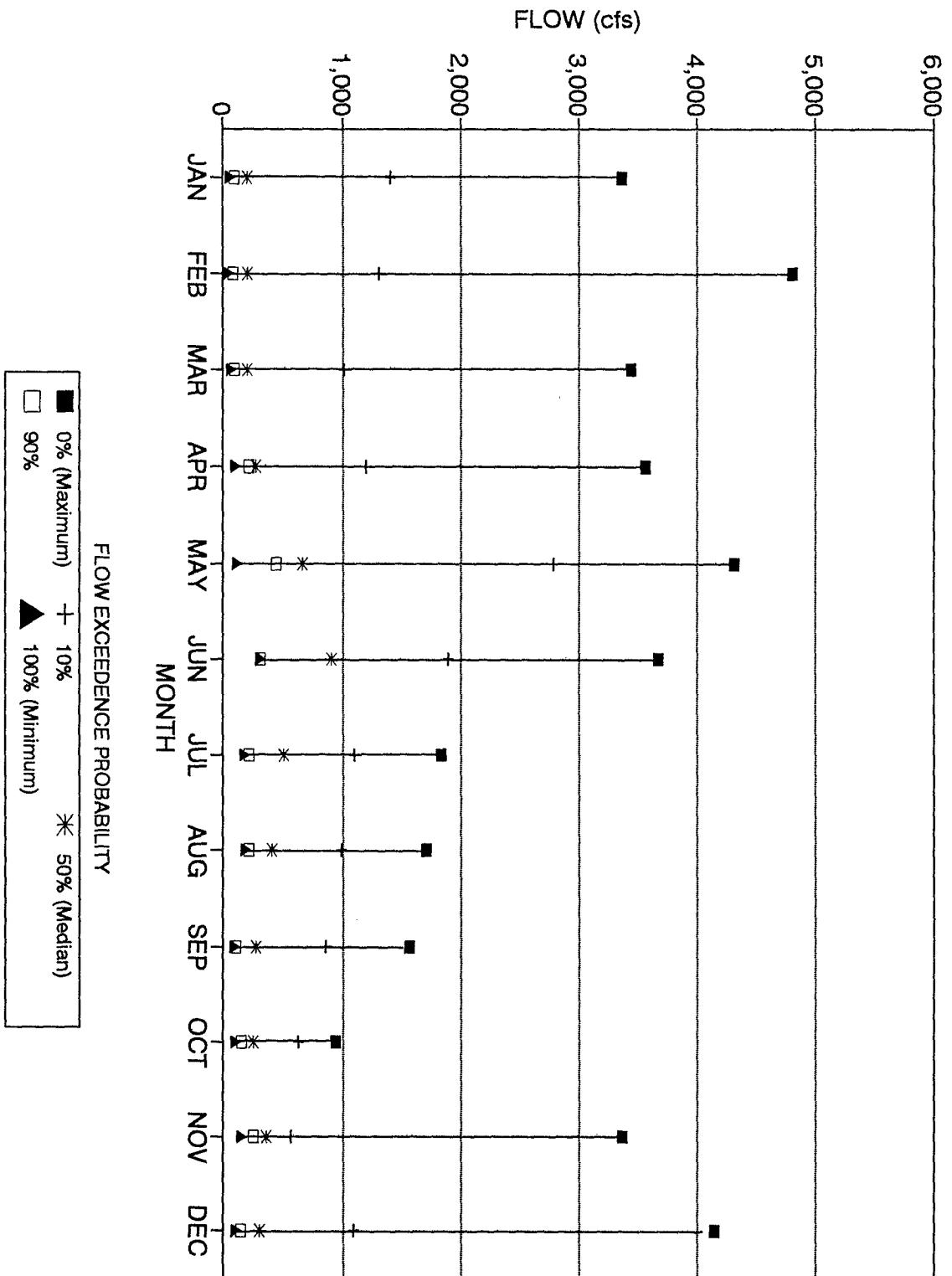
C-101665

CAMANCHE RESERVOIR ELEVATION UNDER CPVI - GROUNDWATER ONLY  
SIMULATION FROM 1921-1990 HYDROLOGY DATABASE



C-101666

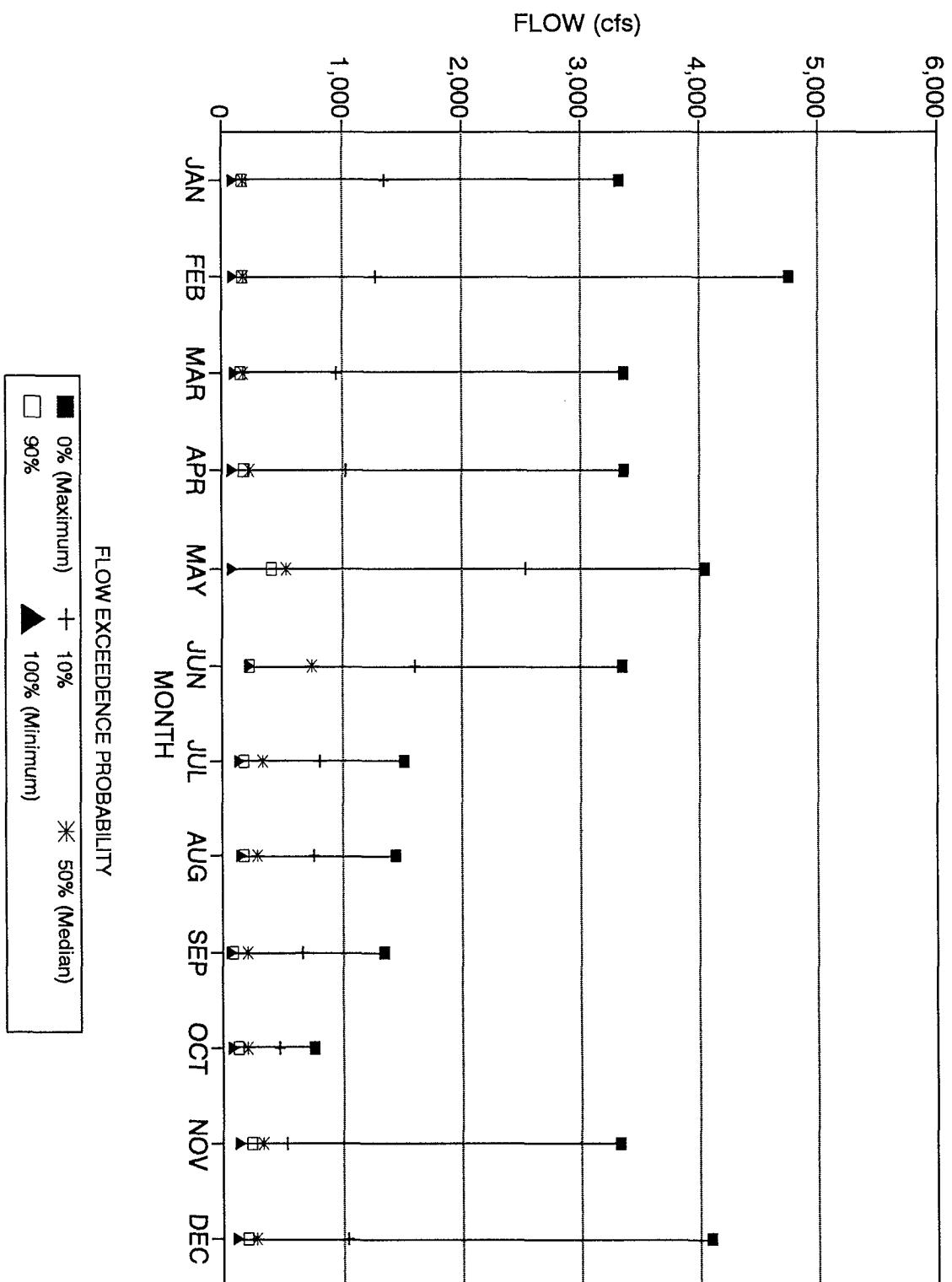
CAMANCHE RELEASES UNDER CPVI - GROUNDWATER ONLY  
SIMULATION FROM 1921-1990 HYDROLOGY DATABASE



C - 1 0 1 6 6 7

C-101667

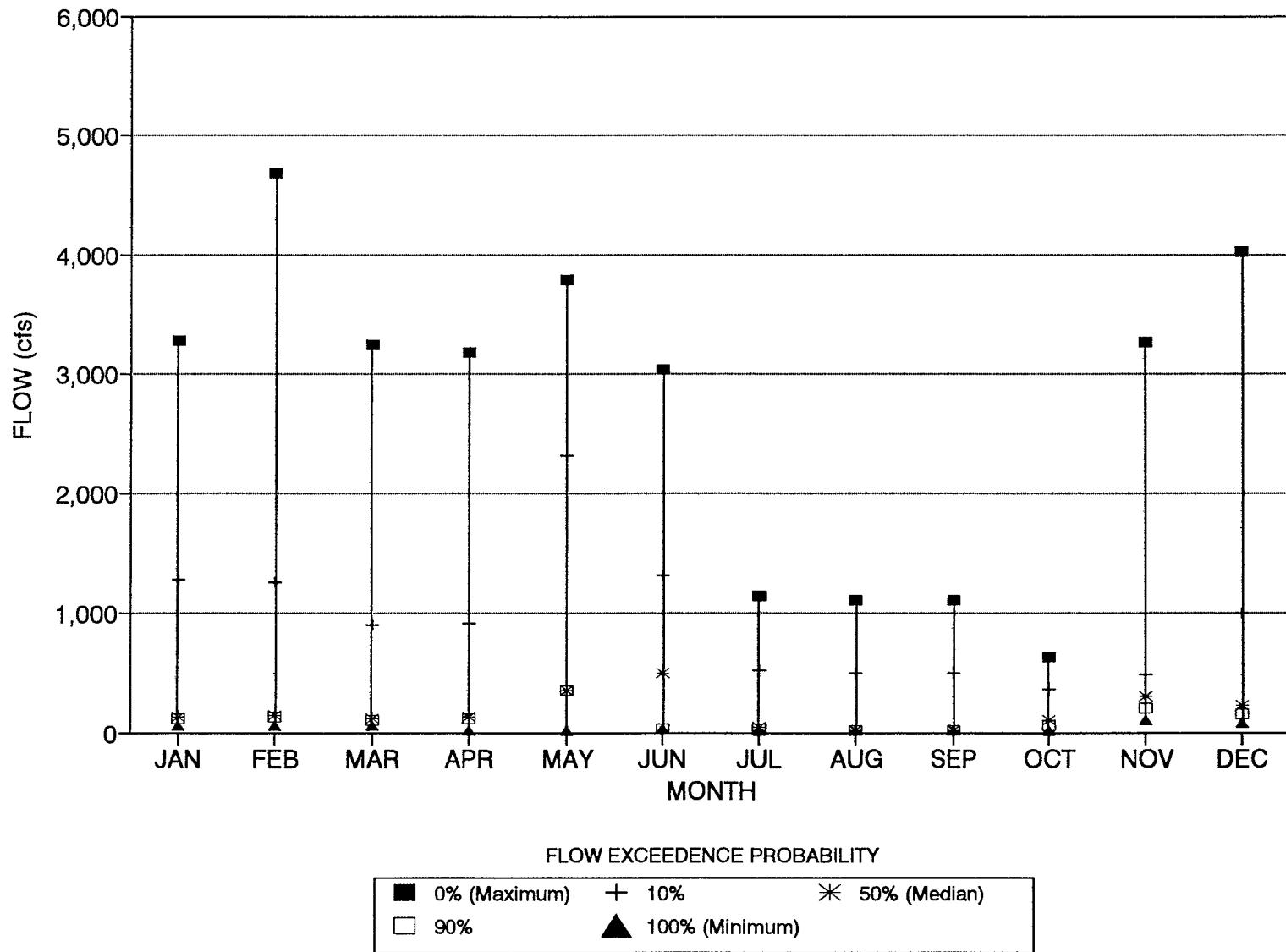
**FLOW AT VICTOR UNDER CPVI - GROUNDWATER ONLY  
SIMULATION FROM 1921-1990 HYDROLOGY DATABASE**



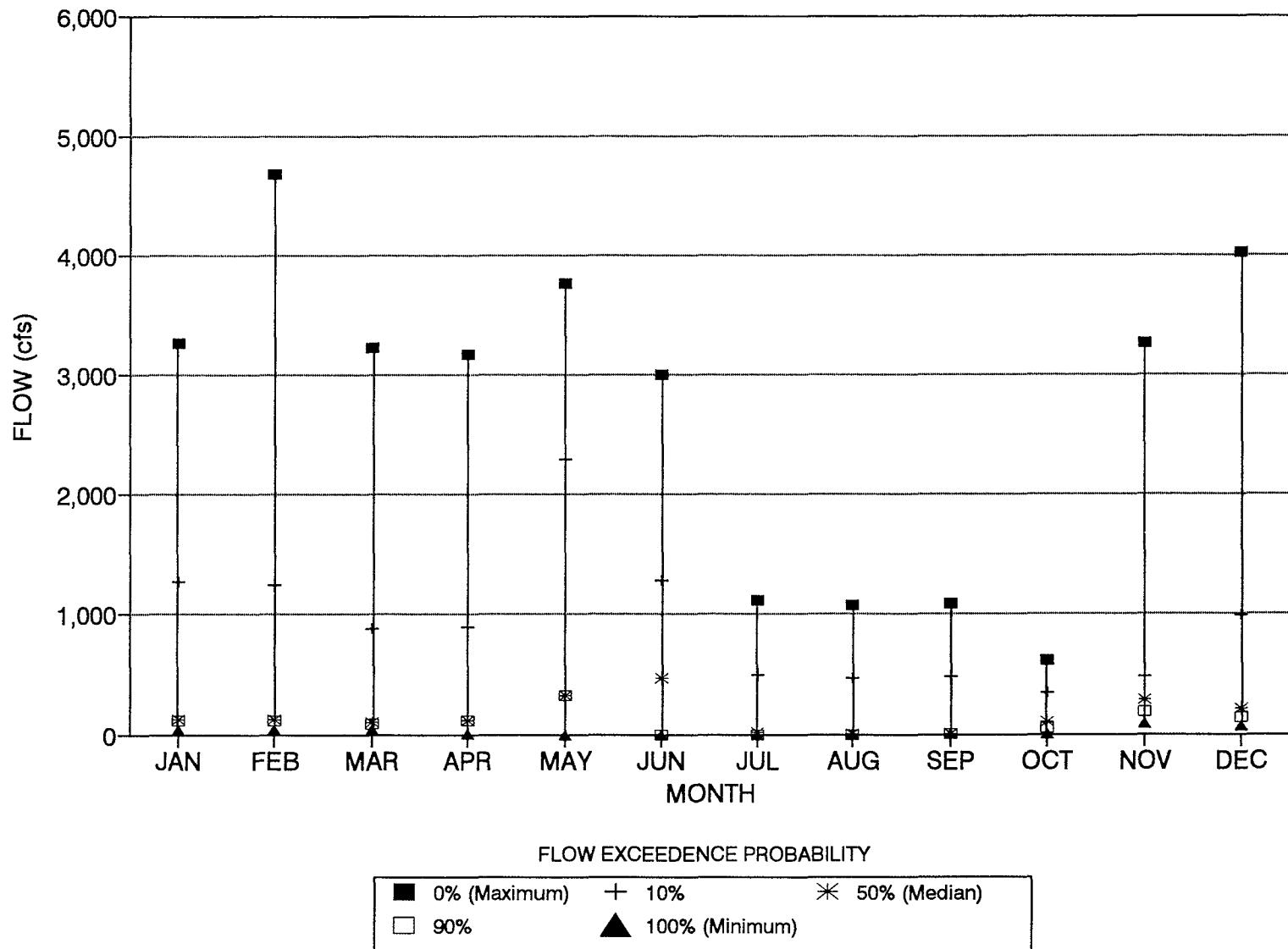
C - 1 0 1 6 6 8

C-101668

FLOW BELOW LAKE LODI UNDER CPVI - GROUNDWATER ONLY  
SIMULATION FROM 1921-1990 HYDROLOGY DATABASE



FLOW INTO THE DELTA UNDER CPVI - GROUNDWATER ONLY  
SIMULATION FROM 1921-1990 HYDROLOGY DATABASE



C-101670

**CONJUNCTIVE USE WATER PUMPED TO MOKELUMNE RIVER (cfs)****1921-1990 Hydrology Database**

ALTERNATIVE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
<b><u>Average over Entire Record</u></b>												
2020 Groundwater CPII	19	19	7	0	0	0	0	0	0	0	0	4
2020 Groundwater and FSC CPIV	19	19	7	0	0	0	0	0	0	0	0	4
2020 Groundwater Only CPVI	27	27	24	0	0	0	0	0	0	0	0	16
<b><u>Average in Dry Years</u></b>												
2020 Groundwater CPII	84	84	22	0	0	0	0	0	0	0	0	4
2020 Groundwater and FSC CPIV	84	84	22	0	0	0	0	0	0	0	0	4
2020 Groundwater Only CPVI	99	99	90	0	0	0	0	0	0	0	0	54
<b><u>Average in Normal Years</u></b>												
2020 Groundwater CPII	10	10	6	0	0	0	0	0	0	0	0	5
2020 Groundwater and FSC CPIV	10	10	6	0	0	0	0	0	0	0	0	5
2020 Groundwater Only CPVI	23	22	20	0	0	0	0	0	0	0	0	16
<b><u>Average in Wet Years</u></b>												
2020 Groundwater CPII	2	2	2	0	0	0	0	0	0	0	0	2
2020 Groundwater and FSC CPIV	2	2	2	0	0	0	0	0	0	0	0	2
2020 Groundwater Only CPVI	2	2	2	0	0	0	0	0	0	0	0	2

C-1101671

## **HYDROLOGY DATA FROM PROSIM**

File: Pro_Sum	EBMUDSIM	EBMUDSIM	EBMUDSIM	Folsom	Folsom	Folsom	Flow	Flow	Flow	Flow @	Flow @	Flow @	Am/Mok	Am/Mok	Am/Mok	
10/14/92	9995	5633	9995	Storage	Storage	Storage	below	below	H Street	H Street	H Street	Confince	Confince	Confince		
PROSIM	American	Mokelumne	Mokelumne	EBM_BASE	2020NoEB	2020-SIM	Nimbus	Nimbus	Nimbus	EBM_BASE	2020NoEB	2020-SIM	EBM_BASE	2020NoEB	2020-SIM	
Date	Date	River	Delta	Delta			EBM_Base	2020NoEB	2020-SIM							
		Use	Inflow	Inflow												
Count		684	684	684	684	684	684	684	684	684	684	684	684	684	684	
Sum WY 22-78	950.3	13490.5	14454.4	442888.0	459167.0	459026.0	140515.0	129710.0	128771.0	136354.0	118606.0	117656.0	916134.0	890855.0	889945.0	
Min WY 22-78	0.0	0.0	0.0	102.0	135.0	135.0	14.0	15.0	15.0	11.0	11.0	11.0	313.0	314.0	314.0	
Avg WY 22-78	1.4	19.7	21.1	647.5	671.3	671.1	205.4	189.6	188.3	199.3	173.4	172.0	1339.4	1302.4	1301.1	
Max WY 22-78	13.8	248.2	247.8	1010.0	1010.0	1010.0	1114.0	1196.0	1196.0	1118.0	1195.0	1195.0	4384.0	4365.0	4365.0	
Std WY 22-78	3.9	30.3	31.6	213.4	180.6	180.8	157.3	158.0	157.9	158.2	159.9	159.7	860.5	860.0	859.6	
<b>BY MONTH</b>																
Count	Jan	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	
	Feb	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	
	Mar	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	
	Apr	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	
	May	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	
	Jun	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	
	Jul	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	
	Aug	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	
	Sep	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	
	Oct	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	
	Nov	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	
	Dec	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	57.0	
Average	Jan	2.1	24.7	27.4	545.5	570.8	570.6	248.9	257.1	255.0	248.6	252.8	250.7	1883.5	1899.2	1896.8
	Feb	2.1	19.1	26.7	603.1	612.6	612.5	233.7	239.7	237.5	233.2	235.2	233.0	2049.6	2038.8	2036.5
	Mar	1.2	17.0	19.1	668.0	671.1	671.0	253.4	247.2	246.0	250.2	238.0	236.8	1874.5	1871.3	1869.8
	Apr	2.5	17.1	17.4	780.7	780.9	780.9	227.2	215.2	212.8	222.6	202.2	199.8	1471.5	1437.4	1435.0
	May	0.0	44.1	47.2	905.1	902.2	902.1	218.1	203.9	203.9	209.1	182.1	182.1	1302.2	1237.0	1237.4
	Jun	0.2	30.1	30.8	890.5	886.3	886.2	197.3	178.4	178.2	186.0	151.2	150.9	1147.6	1099.9	1099.7
	Jul	2.2	11.7	10.7	721.8	752.5	751.7	266.5	209.2	207.7	253.5	177.4	175.9	1149.8	1069.4	1067.9

C - 1 0 1 6 7 3

File: Pro\_Sum EBMUDSIM EBMUDSIM EBMUDSIM Folsom Folsom Folsom Flow Flow Flow Flow @ Flow @ Flow @  
 10/14/92 9995 5633 9995 Storage Storage Storage below below below H Street H Street H Street Conflnce Conflnce Conflnce  
 PROSIM American MokelumneMokelumneEBM\_BASE 2020NoEB 2020-SIM Nimbus Nimbus Nimbus EBM\_BASE 2020NoEB 2020-SIM EBM\_BASE 2020NoEB 2020-SIM  
 Date Date River Delta Delta EBMSim 2020NoEB 2020-SIM  
 Use Inflow Inflow

Aug		1.8	11.1	10.0	604.1	646.8	646.4	201.9	167.5	165.3	190.0	138.1	135.9	985.3	952.1	951.0
Sep		0.4	11.0	10.0	535.5	574.1	573.8	152.2	136.4	135.9	142.3	110.9	110.4	984.9	880.6	880.3
Oct		0.2	10.4	10.6	511.9	557.4	557.3	109.5	86.9	86.5	103.5	72.3	71.9	750.4	751.8	751.3
Nov		1.3	19.1	19.8	493.3	546.7	546.6	147.4	126.4	125.1	144.4	117.3	115.9	964.8	906.4	904.8
Dec		2.6	21.5	24.0	510.4	554.3	554.1	209.1	207.7	205.3	208.6	203.3	200.9	1508.5	1485.1	1482.5

## BY YEAR TYPE

	Count														
1	228.0	228.0	228.0	228.0	228.0	228.0	228.0	228.0	228.0	228.0	228.0	228.0	228.0	228.0	228.0
2	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0
3	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0
4	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0
5	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0
6	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0
7	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
	Average														
1	0.8	39.1	40.4	725.8	729.0	729.1	303.1	290.2	289.5	297.7	274.4	273.7	1960.7	1916.3	1915.4
2	1.7	16.0	18.9	663.9	675.7	675.5	203.8	189.5	187.7	197.7	173.0	171.2	1349.2	1321.6	1319.7
3	1.6	13.8	16.0	694.6	721.0	721.0	181.5	174.4	172.8	175.5	157.9	156.4	1093.1	1070.7	1069.2
4	1.6	7.7	8.2	649.9	660.6	660.4	134.9	127.5	126.0	128.2	110.6	109.0	1085.9	1079.6	1078.3
5	2.4	6.3	6.7	626.3	660.1	660.0	151.9	119.1	116.6	145.5	102.2	99.8	928.3	879.0	876.9
6	1.1	6.2	6.9	471.7	549.9	548.6	104.7	89.5	88.7	97.9	72.3	71.5	686.7	646.7	646.0
7	0.0	1.6	4.3	147.0	237.5	237.5	31.1	25.8	25.8	24.0	21.1	21.1	607.7	553.5	553.5

## AVERAGE BY YEAR TYPE/MONTH

	Year Type 1														
Jan	1.5	57.5	64.8	610.0	610.0	610.0	533.2	531.5	530.0	535.1	529.6	528.1	3325.6	3346.7	3344.6
Feb	0.1	43.1	52.6	639.8	639.8	639.8	397.2	387.9	387.8	396.9	383.8	383.8	3110.5	3091.4	3091.1
Mar	1.2	34.1	34.3	708.6	707.8	707.8	374.3	362.2	361.0	371.9	353.5	352.3	2628.3	2640.9	2639.1

C-1101674

File: Pro_Sum		EBMUDSIM	EBMUDSIM	EBMUDSIM	Folsom	Folsom	Folsom	Flow	Flow	Flow	Flow @	Flow @	Flow @	Flow @			
10/14/92		9995	5633	9995	Storage	Storage	Storage	below	below	below	H Street	H Street	H Street	Conflnce			
		PROSIM	American	Mokelumne	Mokelumne	EBM_BASE	2020NoEB	2020-SIM	Nimbus	Nimbus	Nimbus	EBM_BASE	2020NoEB	2020-SIM	EBM_BASE	2020NoEB	2020-SIM
Date	Date	River	Delta	Delta				EBM_Base	2020NoEB	2020-SIM							
		Use	Inflow	Inflow													
Apr		1.4	39.1	38.8	835.0	835.0	835.0	342.1	326.1	324.6	338.0	313.5	312.1	2242.1	2199.7	2198.6	
May		0.0	82.3	84.1	999.4	998.9	998.9	339.2	321.7	321.7	330.4	299.8	299.8	2064.4	1945.7	1947.5	
Jun		0.0	59.4	58.9	986.8	984.5	984.5	311.4	292.4	292.4	299.9	264.6	264.6	1649.3	1560.5	1560.5	
Jul		0.0	25.5	22.6	865.2	852.6	852.6	274.5	261.5	261.5	261.5	229.1	229.1	1354.6	1317.4	1317.4	
Aug		0.0	24.3	21.4	747.9	740.1	740.1	225.0	197.4	197.4	213.1	167.5	167.5	1127.9	1210.7	1210.7	
Sep		0.0	23.8	21.0	647.9	644.7	644.7	199.4	174.6	174.6	189.7	148.3	148.3	1416.7	1175.0	1175.0	
Oct		0.7	10.6	10.7	540.6	567.5	567.8	106.3	95.4	94.7	100.6	81.7	80.9	836.7	856.2	855.2	
Nov		1.2	28.3	28.3	538.7	569.8	570.1	181.5	165.3	164.1	179.8	157.7	156.4	1241.6	1162.0	1159.7	
Dec		3.1	41.1	46.7	589.3	597.2	597.2	353.6	366.6	363.9	354.8	363.9	361.1	2530.6	2489.2	2484.9	
Year	Type 2																
Jan		2.3	9.3	10.1	504.7	532.8	532.3	141.6	141.2	138.9	140.7	136.2	134.0	1510.9	1546.5	1544.3	
Feb		5.0	6.5	20.5	585.2	591.9	591.9	237.6	248.8	243.4	238.1	245.4	239.9	2036.2	2027.5	2022.5	
Mar		0.8	12.5	23.1	644.9	649.0	649.0	338.1	327.7	327.0	335.5	318.8	318.0	2274.3	2241.8	2240.9	
Apr		6.1	7.3	8.2	829.4	823.7	823.7	254.8	249.3	243.3	250.2	236.2	229.9	1659.1	1596.4	1588.8	
May		0.0	47.0	52.5	971.9	963.8	963.8	248.9	233.5	233.5	240.5	211.7	211.7	1412.1	1385.2	1384.3	
Jun		0.0	38.4	42.5	951.0	943.9	943.9	214.7	192.9	192.9	203.2	164.8	164.8	1266.3	1227.6	1227.6	
Jul		0.7	11.6	10.2	813.9	804.3	804.3	238.8	218.1	217.4	225.8	186.0	185.3	1263.5	1242.5	1242.1	
Aug		0.0	10.7	9.2	715.0	710.5	710.5	193.1	165.0	165.0	181.1	135.0	135.0	1120.7	1071.7	1071.8	
Sep		0.0	10.7	9.1	638.0	634.0	634.0	167.5	147.0	147.0	157.6	120.8	120.8	1030.0	990.3	990.3	
Oct		0.0	9.0	9.8	451.6	502.1	501.4	122.0	75.0	74.1	116.5	60.8	59.9	664.5	662.4	661.6	
Nov		1.8	14.3	15.6	430.8	482.9	482.6	129.7	114.7	112.4	126.2	104.8	102.5	837.0	782.1	780.1	
Dec		4.1	15.0	15.9	430.9	469.4	468.8	159.0	161.1	157.4	157.5	156.0	152.2	1115.5	1085.1	1082.4	
Year	Type 3																
Jan		1.2	9.8	9.9	549.5	590.2	590.2	107.8	160.3	159.2	106.3	155.2	154.0	997.5	1045.7	1044.5	
Feb		4.2	8.8	26.2	646.2	646.2	646.2	239.5	270.2	266.2	240.7	266.8	262.5	1865.0	1841.8	1837.3	
Mar		2.3	10.6	12.2	713.2	709.5	709.5	223.8	214.3	212.2	221.3	205.8	203.5	1623.0	1630.0	1627.7	
Apr		4.8	5.6	5.6	834.0	831.3	831.3	223.2	206.7	202.0	218.3	193.5	188.8	1101.0	1057.2	1053.2	
May		0.0	30.1	31.6	972.3	963.7	963.7	233.2	221.5	221.5	224.7	199.7	199.7	1018.0	929.0	929.0	
Jun		0.0	32.9	34.8	981.2	973.2	973.2	136.3	114.8	114.8	125.3	87.3	87.3	928.3	920.8	920.8	

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File: Pro_Sum																			
10/14/92		EBMUDSIM	EBMUDSIM	EBMUDSIM	Folsom	Folsom	Folsom	Flow	Flow	Flow	Flow @	Flow @	Flow @	H Street	H Street	H Street	Confince	Confince	Confince
		9995	5633	9995	Storage	Storage	Storage	below	below	below	H Street	H Street	H Street	Confince	Confince	Confince			
PROSIM		American	Mokelumne	Mokelumne	EBM_BASE	2020NoEB	2020-SIM	Nimbus	Nimbus	Nimbus	EBM_BASE	2020NoEB	2020-SIM	EBM_BASE	2020NoEB	2020-SIM			
Date	Date	River	Delta	Delta	EBM_Base 2020NoEB 2020-SIM														
		Use	Inflow	Inflow	EBM_Base 2020NoEB 2020-SIM														
Jul	0.0	11.1	12.5	815.8	808.3	808.3	265.8	242.3	242.3	252.8	210.0	210.0	1114.3	1131.2	1131.2				
Aug	0.0	10.1	11.5	709.0	708.3	708.3	199.2	169.3	169.3	187.2	139.3	139.3	968.5	922.8	922.8				
Sep	1.7	10.0	11.4	640.0	633.3	633.3	157.7	143.7	142.0	148.3	118.3	116.7	920.8	833.5	832.7				
Oct	0.0	12.1	11.7	507.7	608.7	608.7	104.7	90.2	90.2	98.5	74.8	74.8	739.2	709.8	709.7				
Nov	2.7	13.4	13.4	480.8	589.3	589.3	129.7	108.5	105.8	125.8	98.7	96.0	779.7	753.0	750.5				
Dec	2.3	10.6	11.4	485.5	589.5	589.5	157.5	151.0	148.7	156.7	145.8	143.7	1061.5	1073.7	1071.3				
Year Type 4																			
Jan	3.5	9.0	9.2	512.0	590.8	590.8	123.5	126.8	123.3	122.3	121.5	118.0	1323.3	1312.3	1308.8				
Feb	4.4	7.5	8.8	627.3	653.0	653.0	139.8	182.0	178.0	138.0	176.8	172.3	1754.3	1825.8	1821.3				
Mar	4.3	6.5	6.0	729.3	729.3	729.3	187.0	199.8	195.5	182.8	189.3	185.0	1746.8	1771.8	1767.8				
Apr	0.0	6.6	6.6	804.8	789.3	789.0	143.8	143.5	144.0	138.3	130.0	130.5	1009.5	1035.8	1037.5				
May	0.0	15.0	20.0	871.3	841.8	841.3	97.3	93.5	93.5	87.3	70.5	70.5	731.5	733.8	733.8				
Jun	0.0	0.1	0.1	822.0	785.0	784.5	100.8	87.5	87.5	89.5	59.8	59.8	778.8	801.5	801.5				
Jul	0.0	0.0	0.0	705.8	666.5	666.3	135.8	114.3	114.3	122.8	82.3	82.0	1046.3	1072.3	1072.3				
Aug	4.5	0.0	0.0	622.5	568.3	568.0	138.3	130.8	126.3	126.3	100.8	96.3	1008.5	869.8	867.5				
Sep	0.0	0.3	0.3	545.0	513.3	512.8	150.0	107.0	107.0	140.0	81.8	81.8	851.8	865.0	865.0				
Oct	0.0	15.6	14.9	547.5	614.5	614.5	102.5	95.5	95.5	95.5	79.5	79.5	790.0	808.8	808.8				
Nov	2.6	18.9	19.0	520.0	591.8	591.8	138.3	120.0	117.3	134.8	110.0	107.5	989.3	901.5	898.8				
Dec	0.0	12.8	13.4	491.3	584.3	584.3	162.5	130.0	130.0	161.3	124.8	124.8	1001.0	956.8	956.8				
Year Type 5																			
Jan	4.1	6.7	7.0	586.7	577.2	577.2	109.7	107.7	103.7	108.8	102.6	98.4	1168.0	1149.0	1143.8				
Feb	2.5	6.5	6.5	643.6	634.2	634.2	106.3	96.2	93.6	105.3	90.9	88.5	1297.1	1284.6	1282.1				
Mar	0.8	5.7	5.8	710.1	689.2	689.2	130.1	128.8	128.0	126.2	118.6	117.8	1187.6	1195.7	1194.9				
Apr	2.4	5.3	6.0	792.3	777.0	777.0	144.1	123.2	120.7	139.0	109.3	107.0	885.6	859.0	856.7				
May	0.0	18.0	18.0	914.2	886.3	886.3	101.4	96.1	96.1	91.8	73.4	73.4	750.5	730.4	730.4				
Jun	1.3	0.2	0.2	902.8	867.3	867.3	117.0	103.8	102.5	105.8	76.1	74.7	765.7	740.3	739.0				
Jul	6.2	0.0	0.0	581.5	719.2	717.7	378.7	182.6	177.9	365.8	150.3	145.6	1008.9	743.6	739.0				
Aug	7.3	0.0	0.0	372.6	575.2	575.7	273.8	185.2	175.6	261.8	155.2	145.7	928.7	735.0	730.1				
Sep	1.3	0.3	0.3	338.2	516.8	517.3	108.8	111.4	110.0	98.6	85.6	84.3	636.1	582.5	581.6				

File: Pro_Sum		EBMUDSIM	EBMUDSIM	EBMUDSIM	Folsom	Folsom	Folsom	Flow	Flow	Flow	Flow @	Flow @	Flow @	Flow @		
10/14/92		9995	5633	9995	Storage	Storage	Storage	below	below	below	H Street	H Street	H Street	Confince	Confince	
PROSIM		American	Mokelumne	Mokelumne	EPM_BASE	2020NoEB	2020-SIM	Nimbus	Nimbus	Nimbus	EPM_BASE	2020NoEB	2020-SIM	EPM_BASE	2020NoEB	2020-SIM
Date	Date	River	Delta	Delta				EBM_Base	2020NoEB	2020-SIM						
		Use	Inflow	Inflow												
Oct		0.0	9.0	9.8	566.4	560.9	560.4	110.7	81.3	81.3	104.1	65.8	65.8	705.1	723.2	723.1
Nov		0.5	14.2	16.0	536.9	548.8	548.1	137.8	107.2	106.9	135.0	97.7	97.3	832.5	808.1	808.0
Dec		1.9	9.6	11.0	570.0	569.3	569.3	104.7	105.7	103.2	103.9	101.2	98.7	973.6	996.4	994.0
Year Type 6																
Jan		0.9	7.8	7.8	443.1	534.6	534.0	54.9	82.0	81.1	52.6	75.6	74.6	778.3	805.6	804.7
Feb		0.0	7.5	7.2	486.4	546.4	545.9	46.1	67.4	67.4	44.3	61.3	61.3	753.0	750.1	750.1
Mar		0.0	6.5	6.2	531.1	577.4	576.9	77.0	77.4	77.4	72.3	66.9	66.9	704.9	682.6	682.6
Apr		0.0	6.6	6.6	576.1	609.4	609.0	76.3	74.0	74.0	71.1	60.0	60.0	663.6	641.1	641.1
May		0.0	8.6	17.1	605.9	647.0	646.4	96.6	70.7	70.7	87.3	48.1	48.1	555.3	488.6	488.6
Jun		0.0	0.1	0.1	589.6	634.4	633.7	109.7	85.0	85.0	98.9	57.6	57.6	650.4	579.9	580.0
Jul		7.9	0.0	0.5	412.6	522.0	518.1	233.7	146.1	141.4	220.9	113.4	108.9	796.1	615.4	610.7
Aug		2.0	0.1	0.3	354.1	452.6	448.7	113.6	100.9	99.3	101.7	71.0	69.4	559.9	521.1	520.1
Sep		0.0	0.4	0.5	331.9	408.1	404.9	78.0	79.0	78.3	67.4	53.3	52.6	465.7	465.7	465.3
Oct		0.0	10.5	10.3	477.7	572.7	572.7	108.0	88.3	88.0	102.0	73.4	73.3	701.0	662.1	662.0
Nov		0.0	14.8	14.9	441.4	554.3	554.3	128.7	97.4	97.4	124.6	87.1	87.1	777.6	732.3	732.3
Dec		2.0	11.4	11.4	410.0	539.3	538.7	133.3	105.7	104.3	131.4	99.7	98.3	835.0	815.4	814.6
Year Type 7																
Jan		0.0	2.6	7.6	143.0	199.0	199.0	18.0	22.0	22.0	15.0	15.0	15.0	658.0	552.0	552.0
Feb		0.0	2.4	7.4	144.0	186.0	186.0	16.0	20.0	20.0	14.0	14.0	14.0	915.0	746.0	746.0
Mar		0.0	2.5	5.9	149.0	203.0	203.0	20.0	16.0	16.0	15.0	15.0	15.0	629.0	465.0	465.0
Apr		0.0	0.3	6.6	164.0	231.0	231.0	17.0	15.0	15.0	11.0	14.0	14.0	539.0	611.0	611.0
May		0.0	0.0	0.0	179.0	266.0	266.0	20.0	15.0	15.0	12.0	14.0	14.0	456.0	456.0	456.0
Jun		0.0	0.0	0.0	170.0	282.0	282.0	23.0	15.0	15.0	11.0	13.0	13.0	516.0	574.0	574.0
Jul		0.0	0.0	0.0	145.0	286.0	286.0	24.0	15.0	15.0	12.0	13.0	13.0	635.0	679.0	679.0
Aug		0.0	0.3	0.3	123.0	256.0	256.0	24.0	52.0	52.0	12.0	50.0	50.0	472.0	538.0	538.0
Sep		0.0	0.5	0.7	108.0	256.0	256.0	30.0	30.0	30.0	20.0	29.0	29.0	367.0	418.0	418.0
Oct		0.0	0.6	3.6	150.0	239.0	239.0	103.0	38.0	38.0	96.0	23.0	23.0	678.0	602.0	602.0
Nov		0.0	5.4	11.4	150.0	236.0	236.0	44.0	33.0	33.0	39.0	22.0	22.0	633.0	436.0	436.0
Dec		0.0	4.0	8.6	139.0	210.0	210.0	34.0	38.0	38.0	31.0	31.0	31.0	794.0	565.0	565.0

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File: Pro_Sum	Delta	Delta	Delta	Delta	Delta	Delta	Delta	Delta	Delta
10/14/92	Inflow	Inflow	Inflow	Inflow	Outflow	Outflow	Outflow	Outflow	Outflow
	PROSIM	EBM_BASE	2020NoEB	2020-SIM	2020-SIM	EBM_BASE	2020NoEB	2020-SIM	2020-SIM
Date	Date	Adjusted						Adjusted	

Count	684	684	684	684	684	684	684	684
Sum WY 22-78	1244470	1216551	1215604	1216568	786855.0	766159.0	765692.0	766655.9
Min WY 22-78	368.0	377.0	377.0	377.2	149.0	149.0	149.0	149.2
Avg WY 22-78	1819.4	1778.6	1777.2	1778.6	1150.4	1120.1	1119.4	1120.8
Max WY 22-78	12957.0	12975.0	12975.0	12980.2	12285.0	12298.0	12298.0	12303.2
StD WY 22-78	1607.1	1615.0	1614.7	1617.1	1576.2	1575.8	1575.4	1577.9

**BY MONTH**

Average									
Jan	2999.2	3032.8	3030.2	3032.9	2269.3	2313.3	2311.8	2314.5	
Feb	3190.2	3185.2	3182.8	3190.4	2497.6	2497.6	2495.7	2503.3	
Mar	2761.6	2756.3	2754.8	2756.9	2072.4	2046.9	2045.8	2047.9	
Apr	2028.1	1981.3	1978.9	1979.2	1348.9	1308.2	1307.0	1307.2	
May	1676.3	1591.5	1591.9	1595.1	1182.8	1118.8	1119.3	1122.4	
Jun	1406.9	1345.6	1345.4	1346.2	858.1	816.2	816.1	816.8	
Jul	1289.3	1196.3	1194.9	1193.9	515.9	479.4	479.4	478.4	

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File: Pro\_Sum      Delta      Delta      Delta      Delta      Delta      Delta      Delta      Delta  
 10/14/92      Inflow      Inflow      Inflow      Inflow      Outflow      Outflow      Outflow      Outflow  
 PROSIM      EBM\_BASE 2020NoEB 2020-SIM 2020-SIM EBM\_BASE 2020NoEB 2020-SIM 2020-SIM  
 Date      Date           Adjusted           Adjusted

	Aug	1102.2	1060.0	1058.9	1057.8	402.9	380.9	380.7	379.6
Sep	1129.1	1023.3	1023.0	1021.9	499.5	393.9	393.8	392.8	
Oct	962.6	969.4	968.8	969.1	341.4	338.3	338.1	338.3	
Nov	1225.7	1162.9	1161.3	1162.0	535.6	485.3	484.6	485.3	
Dec	2061.5	2038.3	2035.5	2038.0	1280.0	1262.5	1261.0	1263.5	

## BY YEAR TYPE

	Count								
1	228.0	228.0	228.0	228.0	228.0	228.0	228.0	228.0	228.0
2	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0
3	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0	72.0
4	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0	48.0
5	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0	120.0
6	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0	84.0
7	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
	Average								
1	2859.7	2809.6	2808.5	2809.8	2149.9	2088.7	2088.0	2089.3	
2	1749.9	1717.8	1715.9	1718.7	1055.9	1028.3	1027.2	1030.1	
3	1401.1	1377.1	1375.6	1377.9	711.8	704.7	703.9	706.2	
4	1333.6	1320.6	1319.3	1319.8	648.5	634.9	634.5	635.0	
5	1144.9	1092.0	1089.9	1090.3	496.9	484.0	483.2	483.6	
6	851.8	812.6	811.9	812.6	295.7	289.8	289.7	290.4	
7	720.4	666.6	666.6	669.4	259.3	241.8	241.8	244.5	

## AVERAGE BY YEAR TY

	Year Type 1								
Jan	5956.3	6022.8	6020.3	6027.6	5230.1	5320.8	5319.2	5326.4	
Feb	5390.4	5352.9	5352.0	5361.5	4721.6	4685.6	4684.7	4694.2	
Mar	4192.6	4231.6	4229.7	4229.9	3502.2	3495.3	3494.1	3494.3	

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File: Pro_Sum	Delta	Delta	Delta	Delta	Delta	Delta	Delta	Delta	Delta
10/14/92	Inflow	Inflow	Inflow	Inflow	Outflow	Outflow	Outflow	Outflow	Outflow
	PROSIM	EBM_BASE	2020NoEB	2020-SIM	2020-SIM	EBM_BASE	2020NoEB	2020-SIM	2020-SIM
Date	Date	Adjusted						Adjusted	

Apr	3277.6	3214.5	3213.4	3213.1	2563.2	2485.9	2485.6	2485.3
May	2708.5	2557.6	2559.4	2561.1	2202.7	2052.3	2054.1	2055.9
Jun	2099.2	1988.3	1988.3	1987.8	1524.2	1417.8	1417.8	1417.3
Jul	1574.2	1519.1	1519.1	1516.2	741.0	688.2	688.2	685.3
Aug	1288.7	1361.0	1361.0	1358.1	504.0	496.6	496.6	493.7
Sep	1617.5	1375.8	1375.8	1373.0	854.8	599.8	599.8	597.0
Oct	1067.4	1089.2	1088.0	1088.0	411.8	412.5	411.6	411.7
Nov	1607.8	1501.1	1498.8	1498.9	844.1	729.7	728.1	728.1
Dec	3535.7	3501.2	3496.5	3502.1	2699.3	2679.7	2676.5	2682.1

Year	Type 2								
Jan	1960.3	2004.9	2002.7	2003.5	1217.6	1264.7	1263.6	1264.4	
Feb	2921.9	2956.8	2951.8	2965.8	2235.4	2261.1	2256.8	2270.8	
Mar	3431.5	3344.1	3342.5	3353.1	2653.2	2558.5	2557.1	2567.7	
Apr	2209.0	2130.8	2123.2	2124.1	1449.9	1378.2	1373.4	1374.3	
May	1751.7	1704.4	1703.5	1709.0	1236.3	1208.5	1207.6	1213.1	
Jun	1489.3	1441.9	1441.9	1446.0	931.4	894.7	894.7	898.8	
Jul	1374.0	1346.5	1346.1	1344.8	552.4	533.4	533.4	532.1	
Aug	1232.0	1178.1	1178.2	1176.6	453.2	425.8	425.9	424.3	
Sep	1166.4	1127.2	1127.2	1125.7	467.9	405.8	405.8	404.3	
Oct	866.7	870.3	869.5	870.3	273.1	273.4	273.4	274.2	
Nov	1044.1	1005.3	1003.3	1004.6	396.6	375.5	375.4	376.7	
Dec	1552.3	1503.2	1500.5	1501.5	803.7	759.9	759.2	760.2	

Year	Type	3	Jan	1355.0	1408.2	1407.0	1407.1	635.2	694.8	694.2	694.3
			Feb	2658.5	2652.3	2647.8	2665.2	1900.3	1959.8	1956.2	1973.6
			Mar	2218.5	2225.5	2223.2	2224.8	1472.5	1476.2	1474.8	1476.5
			Apr	1423.5	1367.8	1363.8	1363.8	699.3	671.5	670.5	670.5
			May	1290.3	1188.5	1188.5	1190.0	769.0	679.3	679.3	680.9
			Jun	1113.2	1095.7	1095.7	1097.5	567.2	565.0	565.0	566.8

File: Pro_Sum 10/14/92	Delta PROSIM	Delta EBM_BASE	Delta 2020NoEB	Delta 2020-SIM	Delta 2020-SIM	Delta EBM_BASE	Delta 2020NoEB	Delta 2020-SIM	Delta 2020-SIM
Date	Date			Adjusted			Adjusted		
Jul	1225.7	1231.0	1231.0	1232.4	422.5	424.8	424.8	426.3	
Aug	1073.7	1019.2	1019.2	1020.6	365.7	350.0	350.0	351.4	
Sep	1045.8	956.2	955.3	956.7	386.0	313.8	313.8	315.2	
Oct	959.2	935.7	935.5	935.1	332.3	306.8	306.8	306.5	
Nov	1013.0	992.5	990.0	990.0	325.5	317.0	315.5	315.5	
Dec	1437.2	1453.0	1450.7	1451.4	666.3	697.7	696.3	697.1	
Year Type 4									
Jan	1704.5	1692.5	1689.0	1689.2	959.0	960.0	958.3	958.4	
Feb	2265.0	2339.0	2334.5	2335.8	1559.0	1618.3	1616.3	1617.6	
Mar	2020.0	2043.3	2039.3	2038.8	1392.0	1287.3	1285.0	1284.6	
Apr	1221.3	1240.8	1242.5	1242.5	513.3	505.5	506.3	506.3	
May	959.0	941.8	941.8	946.7	467.0	467.0	467.0	472.0	
Jun	946.0	943.3	943.3	943.3	409.0	409.0	409.0	409.0	
Jul	1171.8	1168.3	1168.3	1168.3	379.5	379.5	379.5	379.5	
Aug	1131.8	968.8	966.5	966.5	367.0	331.3	331.3	331.3	
Sep	976.8	982.8	982.8	982.8	323.3	327.5	327.5	327.5	
Oct	1040.5	1091.8	1091.8	1091.0	340.5	366.3	366.3	365.5	
Nov	1230.8	1144.0	1141.3	1141.4	507.8	446.3	446.3	446.4	
Dec	1335.5	1291.3	1291.3	1291.8	564.8	521.0	521.0	521.6	
Year Type 5									
Jan	1497.4	1478.0	1472.8	1473.1	734.0	714.3	711.2	711.5	
Feb	1707.9	1703.5	1701.0	1701.1	998.0	984.4	983.1	983.2	
Mar	1501.7	1503.6	1502.8	1502.9	811.5	813.6	812.7	812.8	
Apr	1142.2	1109.8	1107.5	1108.1	494.9	508.9	507.7	508.3	
May	963.8	933.2	933.2	933.2	471.1	478.2	478.2	478.2	
Jun	920.4	887.6	886.3	886.3	374.5	375.5	374.8	374.8	
Jul	1101.5	826.9	822.3	822.3	358.2	293.0	293.0	293.0	
Aug	1011.6	808.9	804.0	804.0	341.5	284.1	282.9	282.9	
Sep	749.4	692.6	691.7	691.7	247.9	228.6	228.3	228.3	

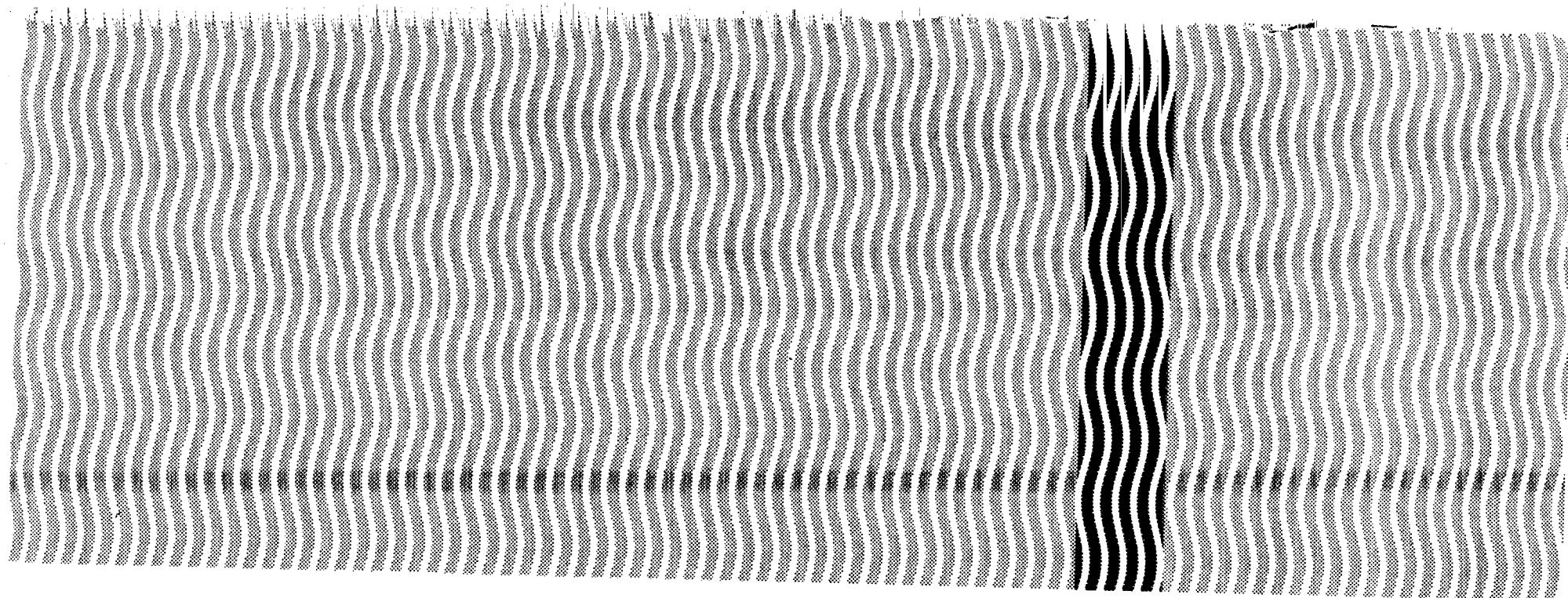
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File: Pro\_Sum      Delta      Delta      Delta      Delta      Delta      Delta      Delta      Delta  
 10/14/92      Inflow      Inflow      Inflow      Inflow      Outflow      Outflow      Outflow      Outflow  
 PROSIM   EBM\_BASE 2020NoEB 2020-SIM 2020-SIM EBM\_BASE 2020NoEB 2020-SIM 2020-SIM

Date	Date	Adjusted				Adjusted			
Oct		867.3	885.4	885.3	886.2	298.4	301.2	301.2	302.1
Nov		1036.5	1012.0	1011.9	1013.7	383.3	376.6	376.6	378.4
Dec		1239.2	1261.9	1259.5	1260.8	450.0	449.8	448.9	450.2
Year Type 6									
Jan		1064.3	1097.6	1096.7	1096.7	361.4	383.9	383.4	383.5
Feb		1013.0	1017.4	1017.4	1017.1	331.0	334.3	333.6	333.3
Mar		894.1	871.4	871.4	871.1	323.0	323.0	322.9	322.6
Apr		817.1	791.9	791.9	791.9	317.4	306.1	306.1	306.1
May		671.4	599.1	599.1	607.7	252.3	246.0	246.0	254.6
Jun		738.4	663.0	663.1	663.1	232.0	232.0	232.0	232.0
Jul		869.3	683.9	679.1	679.6	275.7	240.1	240.1	240.6
Aug		630.9	587.3	586.3	586.5	226.6	220.3	220.3	220.5
Sep		548.9	547.0	546.6	546.7	187.4	191.4	191.1	191.2
Oct		933.7	900.7	900.6	900.3	326.3	309.0	309.0	308.8
Nov		964.6	928.9	928.9	929.0	349.0	340.3	340.3	340.4
Dec		1075.7	1062.9	1062.0	1062.0	366.6	351.4	351.6	351.6
Year Type 7									
Jan		811.0	705.0	705.0	710.0	286.0	277.0	277.0	282.0
Feb		1024.0	855.0	855.0	860.0	362.0	310.0	310.0	315.0
Mar		771.0	608.0	608.0	611.4	277.0	277.0	277.0	280.4
Apr		670.0	742.0	742.0	748.2	268.0	269.0	269.0	275.2
May		653.0	653.0	653.0	653.0	246.0	246.0	246.0	246.0
Jun		582.0	639.0	639.0	639.0	232.0	232.0	232.0	232.0
Jul		702.0	749.0	749.0	749.0	240.0	241.0	241.0	241.0
Aug		522.0	590.0	590.0	590.0	195.0	208.0	208.0	208.0
Sep		442.0	492.0	492.0	492.2	150.0	178.0	178.0	178.2
Oct		795.0	719.0	719.0	722.0	277.0	233.0	233.0	236.0
Nov		755.0	558.0	558.0	564.0	268.0	208.0	208.0	214.0
Dec		918.0	689.0	689.0	693.6	311.0	222.0	222.0	226.6

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